BC Centre for Disease Control

PERFORMANCE PLAN

Promoting and Protecting Public Health

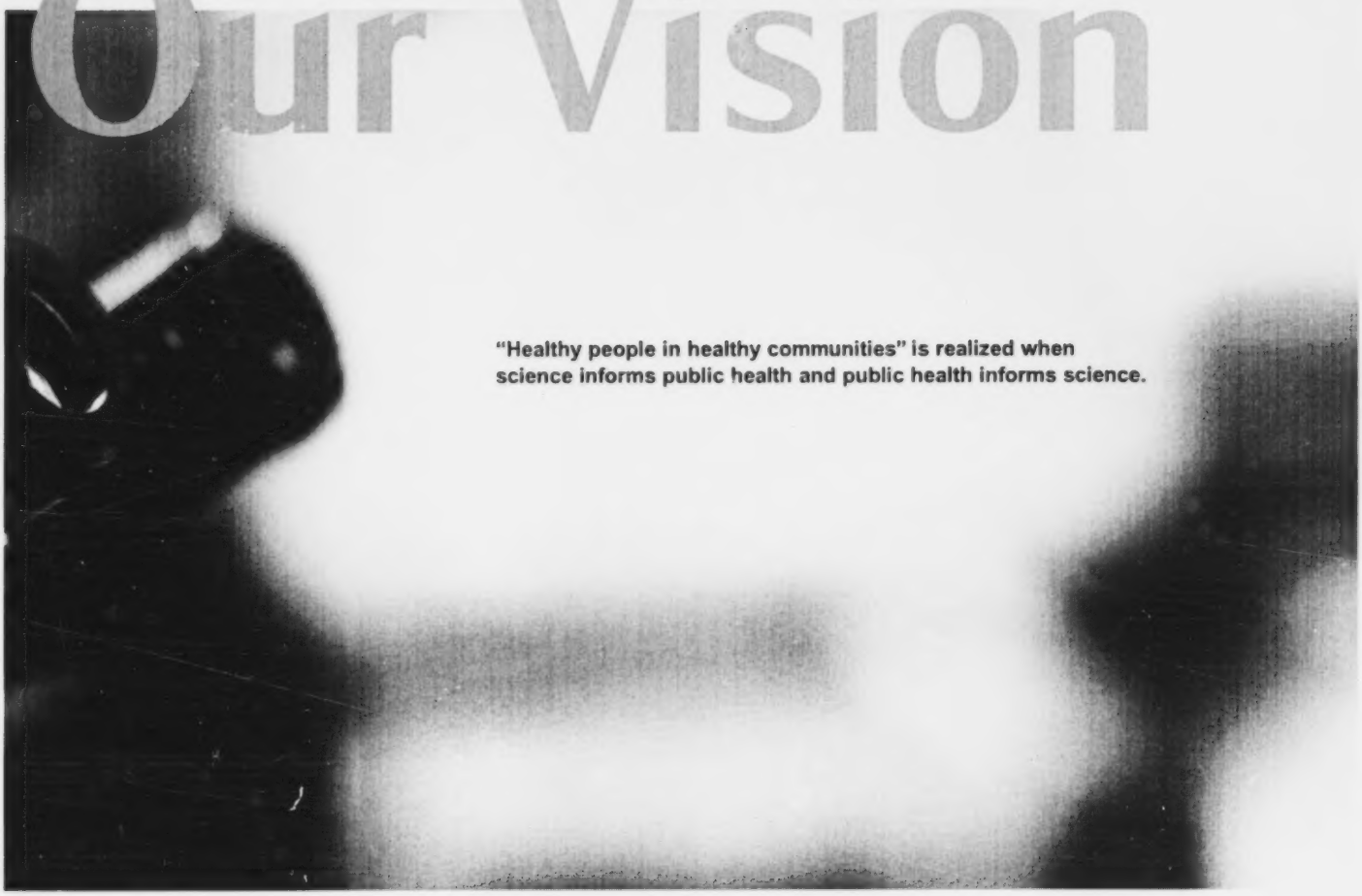
04/05

BC Centre for Disease Control

Canadian Council on Health Services Accreditation

Conseil canadien d'agrément des services de santé

Our Vision



"Healthy people in healthy communities" is realized when science informs public health and public health informs science.

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BC Centre for Disease Control

AN AGENCY OF THE PROVINCIAL HEALTH SERVICES AUTHORITY

Provincial Health Services Authority

The British Columbia Centre for Disease Control (BCCDC) is one of seven provincial agencies directly managed and governed by the Provincial Health Services Authority (PHSA) which was created in December 2001 in order to ensure the deliver of quality, specialty and province-wide services to all British Columbians in an equitable and sustainable manner.

BCCDC embraces the following Vision, Mission, and Values of the Provincial Health Services Authority:

Vision

Province-wide solutions, Better Health

Mission

- To promote and deliver accessible quality health services for all British Columbians through an integrated health system. The PHSA
- Ensures the delivery of quality specialty and province-wide services
- Sets directions and develops province-wide standards.
- Allocates resources to support optimal health outcomes
- Measures, monitors, and reports on performance
- Fosters the creation of knowledge and innovation through research and teaching

Values

- Patients first
- Best value
- Improvements through knowledge
- Open to possibilities

The specific Goals, Strategies and Performance Objectives of the BC Centre for Disease Control and its respective programs and divisions support the following:

PHSA Goals and Objectives

- To administer and deliver high quality specialized health services that produce the expected results
- To administer and support province-wide health care programs and services in collaboration with the health authorities
- To foster and develop health promotion and prevention in the province
- To integrate and co-ordinate efforts within the PHSA and with provincial and community partners to develop appropriate research methodologies and systems, knowledge and innovation
- To integrate and co-ordinate efforts within the PHSA and with provincial and community partners to improve efficiency and service
- To create a sustainable, affordable public health care system through sound financial stewardship
- To respect and value our employees (as a vital component of the health care system) through recognition and support
- To commit to health reform and system performance improvements

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Our Mission

The Mission of the BC Centre for Disease Control and Prevention Society (BCCDC) is to provide leadership in public health through learning, innovation, action and partnerships for a healthier British Columbia.

Through affiliation with the University of British Columbia (UBC) and in partnership with the public health community, "Our Vision – healthy people in healthy communities" is realized when science informs public health and public health informs science."

- BCCDC provides the province and supports national initiatives with state of the art public health surveillance, detection, treatment, prevention and consultation services.
- BCCDC provides direct diagnostic and treatment services for people with diseases of public health importance.
- BCCDC provides analytical and policy support to all levels of government and health authorities for the protection and promotion of health.
- BCCDC is a UBC research and training Centre which assures that health practitioners and the public have ready access to the best people with the latest knowledge.
- BCCDC provides opportunities for scientist, health professionals and other partners to contribute their knowledge and experience in resolving the outstanding health challenges facing British Columbia.
- Ultimately, BCCDC envisions that, through the application of effective public health services, British Columbians will enjoy the benefits of health people living in healthy communities.

Our Future – Opportunities and Challenges

The SARS crisis, which occurred in March 2003, has focused public and political attention on the value of an effective public health capacity to protect the health of British Columbians. SARS reinforced the global nature of emerging disease threats and the tremendous human, social and economic cost of such events. British Columbia's effective response to SARS reinforced the importance of open communication, collaboration, and teamwork, both internally and externally. SARS demonstrated the contribution of science and the importance of knowledge, leadership, highly skilled health professionals, and a dedicated public health infrastructure well integrated into the broader health care system.

As the world reflects on the SARS experience, British Columbia, PHSA, and BCCDC's strengths are being recognized and we can have a degree of confidence that we are on the right track. We are however being challenged to build upon our solid foundation of provincial leadership, continue to develop a well coordinated provincial public health capacity, and join with the nation and other countries in building public health excellence. BCCDC in concert with PHSA is well positioned to initiate plans and collaborations for more effective development of population health prevention strategies. We can build upon our common interest in disease prevention, surveillance, epidemiology, health promotion and research. This affords us both opportunities and challenges.

Some of the key opportunities are:

- SARS Accelerated Vaccine Initiative (SAVI) – British Columbia sponsored initiative enabling research and scientific collaboration to develop a vaccine for SARS.
- David Naylor's report to the National Advisory Committee on SARS and Public Health will likely act as a catalyst for significant resource investment towards enhancing the nation's public health capacity.
- Emerging global collaborative to partner with British Columbia in building public health science and capacity. (Hong Kong and Guang Dong – China and Singapore).
- Provincial support for establishing the National Centre for Disease Control in Vancouver.
- Stronger alliance with University of British Columbia in addressing biotechnology, research, and academic opportunities.
- Public health leadership - BC Core Public Health Functions, new Public Health Act, prevention in primary and chronic care, improved access to public health expertise.
- Recognition of the importance of water and food safety, renewed interest in Environmental Health.
- New collaboratives for prevention strategies – within PHSA, research community, health authorities, other service providers and interest groups.

Our Future – Opportunities and Challenges

Some of the key challenges are:

- Funding for prevention and related public health initiatives in the face of demographic and related fiscal pressures on the health system.
- Infrastructure for public health – especially surveillance and emergency response systems, human resources and space.
- Maintaining key resources and linkages such as laboratory capacity and clinical services in the face of health authority restructuring and consolidation.
- Maintaining a provincial customer focus and capacity in the face of fixed budgets and national and international demands for collaboration.

Strategic Direction

BCCDC's six strategic Goals continue to provide the broad strategic direction that supports the mission and values of PHSA. Our experience with SARS reinforces the resiliency and appropriateness of BCCDC's goals and strategies.

- Prevent, Control and Eliminate Communicable Disease and Environmental Hazards
- Detect and Respond to New Disease Threats
- Develop and Apply Advanced Informatics
- Create Knowledge Through Applied Research and Innovation
- Advance Public Health Excellence
- Provide Leadership and Create Partnerships

The objectives outlined in the plan identify opportunities to reinforce PHSA's leadership in the prevention of disease and strengthening public health capacity in British Columbia.

Achievement.

Commitment.

Provincial Executive Director's Message

This Performance Plan comprises scores of new initiatives and more effective services within our mandated and expected resources.

Mary Jordan,
Provincial Executive Director

This is an exciting time for public health. Both the federal and provincial governments are directing more resources to this area, as evidenced by the recently-announced federal government funding for a national vaccine initiative and continued work on a national initiative to link the various public health systems across the country through Infoway. Another significant example is the creation of the Public Health Agency of Canada. As part of this Agency, the BCCDC has been given a lead role in developing a National Collaborating Centre for Environmental Health – an area where we can make a significant contribution.

Through our strong leadership in the areas of Epidemiology, Surveillance, Laboratory Services, Tuberculosis, STD/AIDs, Hepatitis, Environmental Health and Research, the BCCDC demonstrates its value to improving the health care of British Columbians.

Our recent experience with SARS, avian flu and other communicable diseases has shown the benefit of an organization like the BCCDC – one that can coordinate health care providers and officials at all levels to ensure a consistent and timely response to public health issues. BCCDC's unique integrated structure, one that combines service delivery, policy advice and research, contributes greatly to our ability to identify and respond to emerging public health threats.

Like other PHSA agencies, we have developed a strategic plan that will guide our development over the next few years. We will continue implementing our service plan with a focus on BCCDC's mandate to serve the province and support national initiatives with "state-of-the-art" public health surveillance, detection, prevention and consultation services. We are also focused on providing direct diagnostic and treatment services for people with diseases of public health significance as illustrated by the active TB and STD Clinics we manage. The Centre will continue the development of two new immunization programs, begun in 2003/04, while introducing two more. Plans include preparation for effective response to emerging diseases and outbreaks and to continue to make contributions through policy support, research and collaborations.

We have been given a mandate by the federal government to develop a National Collaborating Centre for Environmental Health and by next April we plan to implement that Centre. Working with other Health Authorities and the Ministry of Health, we are working to develop a comprehensive approach to the key components of environmental health including: food protection, radiation, air and water quality, and drug and poison control. We will leverage our existing BCCDC epidemiological and laboratory services to support this new responsibility.

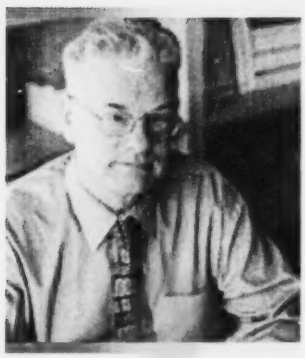
We are fortunate to be home to a dedicated and experienced team – one that is committed to the BCCDC's mandate. We need to be creative in leveraging our existing resources and strengthening our collaborative efforts to meet growing needs and keep our focus on prevention as a long-term strategy to help manage increasing demands.

Together with our partners, governments and stakeholders BCCDC will continue to support and lead public health initiatives, ensuring we attain our mission, "to provide leadership in public health through learning, innovation, action and partnerships for a healthier British Columbia."

Mary B. Jordan
Provincial Executive Director
November 2004

Director, Medical and Academic Affairs

BC Centre for Disease Control will lead the Collaborating Centre for Environmental Health and as such the Centre will have a national reach and federal funding that will improve the provincial program in Environmental Health.



Dr. R.C Brunham,
Director, Medical and Academic Affairs
Director, UBC/CDC

2003/4 has been a year where much has come into focus regarding Public Health developments in the country and in our province, developments in which BCCDC has played an important role. Canada now has a new Public Health Agency (PHAC) led by a Chief Public Health Officer (Dr David Butler-Jones) who reports directly to the federal Minister of Health. This dedicated Agency is sure to strengthen Canada's capacity in dealing with emerging infectious diseases as well as the many other public health priorities in chronic disease prevention, health promotion and environmental hazards. Six new collaborating Centres will create a network of public health expertise from around the country and will enhance the overall effectiveness of the new PHAC. BCCDC will lead the Collaborating Centre for Environmental Health and as such the Centre will have a national reach and federal funding that will improve the provincial program in Environmental Health. At the provincial level we have also seen new alignments in Public Health including the leadership that PHSA will play in chronic disease prevention. This is a logical extension of the PHSA mandate in providing tertiary and quaternary health services for cardiac and renal diseases and for cancer where chronic conditions such as cigarette smoke exposure, atherosclerosis, hypertension and diabetes are central to the causal pathway. In turn these conditions are substantially impacted by health promotion activities such as healthy eating, exercise and tobacco cessation, areas in which PHSA will shortly be launching new activities. Overall these developments in public health build on the BCCDC goal of establishing an integrated public health service for the province through leadership and partnership.

From the point of view of infectious disease control and prevention much has been achieved at the BCCDC. Post SARS two major research initiatives were launched by the provincial government and the CIHR to develop a vaccine for SARS. The SARS Accelerated Vaccine Initiative, led by Dr. Brett Finlay used a novel approach to managing science to developed three prototype SARS vaccines, which were evaluated in animal trials. Dr. Danuta Skowronski led a team of researchers to carry out immunoepidemiological studies on SARS. This achievement put Canada at the forefront of SARS vaccine research and has helped create national interest in developing a more formal mechanism to unite vaccine and immunization researchers throughout the country.

While time showed that the SARS genie was successfully put back in the bottle influenza A arrived in the province with a double dose. Late last year a new H3N2 strain of influenza arrived unexpectedly early and caused two deaths in healthy children. At the time the available vaccine was thought to have a poor match to the epidemic strain although recent studies suggest that it was moderately effective (40 to 65%) in preventing laboratory confirmed influenza. Because of the high degree of antigenic variation in influenza and the importance of this to vaccine effectiveness, laboratory services have now set up a routine sequencing method to track the variation in influenza antigen genes. This may help predict how good a match we have between the vaccine currently used and the actual strains circulating in the community. As well as the usual flu, BC also saw the unexpected arrival of avian flu, H7N3 in many poultry farms in the Fraser Valley. Co-circulation of avian and human influenza strains provides the ecological circumstances in which new pandemic

Director, Medical and Academic Affairs

UBC Centre for Disease Control remains a very active research Centre in the Faculty of Medicine with over $3 million in research grants and contract and 49 peer reviewed publications in the past year.

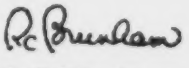
strains of influenza may arise. Thus BCCDC together with other federal partners and animal health scientists followed this occurrence with great attention. Ultimately only two poultry workers acquired avian influenza and none transmitted to other humans although many millions of poultry were either affected or exposed. The avian strain was studied in molecular detail through genome sequencing in collaboration with the Genome Sciences Centre at the BC Cancer Agency and ultimately found not to contain any human influenza genes, a very reassuring finding showing that no reassortment had occurred. In late spring avian influenza was eliminated from the Fraser Valley through massive culling. Currently BC is awaiting the next influenza epidemic better prepared because of our SARS experience and because of the learnings around avian influenza.

Sexually transmitted diseases and blood borne diseases transmitted through unsafe injections continue to concern public health officials in BC. HIV infections rates have increased in part through better case finding following making HIV nominally reportable. Syphilis rates continue to increase primarily through extension of the epidemic into the gay community. Chlamydia rates continue to increase with rates exceeding 1400 per hundred thousand, making chlamydia the commonest reportable infectious disease in BC. Over 8000 cases were reported last year. Despite these concerning trends some important progress has also been achieved; the reproductive sequelae of chlamydia infection continues to decline. Social networking as a way of improving contact tracing has enhanced syphilis case finding especially in the heterosexual community. Hepatitis C rates have stabilized with the lowest number of new infections reported since 1995. The safe injection facility in the downtown east side has significantly improved measures of public order and dramatically reduced drug overdose deaths down to zero.

Major changes in food and water borne diseases are also occurring in the province. We continue to see historic declines in Campylobacter, Ecoli 0157, Salmonella and Yersinia rates all suggesting improvements in food processing and water quality. This trend has been seen throughout the United States although the exact relationship to process improvements has not yet been determined.

Cryptococcus neoformans variety gatti emerged as a new fungal disease in the province in 1999 and has now established itself as an endemic mycoses causing 20 to 25 cases per year, mostly on Vancouver Island. While pneumonia is the main feature of this illness about 20% of the cases have associated meningitis. There still remains no effective prevention tools other than avoidance of exposure to endemic areas. It remains unclear whether the environmental sites of Cryptococcus will extend beyond Vancouver Island. West Nile virus is another emerging infectious disease for BC but fortunately has not reached the province as an endemic infection. All mosquito and corvid surveillance confirmed that BC remains WNV free. While in 2003 BC had 20 cases of travel acquired WNV none were recorded this year. This likely reflects the very low level of WNV activity throughout North America secondary to the unusually cool summer months. Despite the good news this year BC remains at risk for WNV importation next year.

So all in all a very busy year for BCCDC. Lots of excellent work by many excellent professionals. As always it remains a pleasure to work at the Centre and I look forward to seeing what 2005 brings...



Dr. R C Brunham
Director, Medical and Academic Affairs
Director, UBC/CDC
July 2003

Who We Are

BC Centre for Disease Control (BCCDC) is a component of the Provincial Health Services Authority that has responsibility to support a comprehensive program of communicable disease and environmental health prevention and control for the province of British Columbia. BCCDC provides a unique integration of public health programs resulting in highly effective service, while attracting and retaining the very best scientists and clinicians. BCCDC is accountable to the Provincial Health Services Authority, in support of the Minister of Health Services and the people of British Columbia.

Key specialized, yet integrated services within BCCDC operate to support the province's regional health authorities to provide the specialized services necessary to control communicable disease and promote environmental health.

BCCDC's main facility is located at 655 West 12th Avenue in Vancouver. It is augmented by street outreach nurse services and offices in the inner city of Vancouver, by an ambulatory tuberculosis clinic in New Westminster and by consultative clinics at various locations around the province. BCCDC collaborates with the University of British Columbia Centre for Disease Control (UBC CDC) in the advancement of public health policy, applied research and clinical teaching.

Epidemiology Services is the provincial reporting centre for cases of communicable disease. This division tracks and evaluates their occurrence and develops and implements related prevention and control policies and programs.

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Vaccine and Pharmacy Services provides safe, efficient and cost-effective pharmaceutical care services for people being treated for tuberculosis and/or sexually transmitted diseases as well as people receiving vaccines. The division also monitors provincial utilization of antimicrobials for TB and STD.

Hepatitis Services is BCCDC's newest division, working since January 2000 to integrate viral hepatitis prevention and treatment.

Laboratory Services provides public health and microbiology reference services and focuses on issues like safe drinking water, molecular epidemiology and controlling food-borne disease agents.

STD/AIDS Control is the provincial reporting centre for sexually transmitted diseases and AIDS and coordinates province-wide efforts to control them. The division also operates an outpatient clinic and a prevention street program in Vancouver.

Tuberculosis Control is the provincial referral centre for TB prevention, control and treatment. Programs include outpatient clinics in New Westminster and Vancouver; a street outreach program in Vancouver's downtown eastside; field operations for other areas of the province; and services for on- and off-reserve aboriginal people.

Environmental Health Services at BCCDC includes the following programs and services:

Toxicology provides expert "state of the art" scientific consultation in Environmental Health and Toxicology in support of the Ministries of Health Planning and Health Services, Health Authorities and other stakeholders such as WCB, other government Ministries, municipalities individuals and community groups.

Food Protection Services provides leadership in developing strategies, legislation, policies and standards to ensure the safety of B.C.'s food supply.

Radiation Protection Services provides programs and services that help the people of British Columbia protect themselves and others from radiation hazards.

Drug and Poison Information Services assists health professionals and acute and long-term care facilities and provides the public with poison information

In addition to the specific programs identified above BCCDC also provides the following functions:

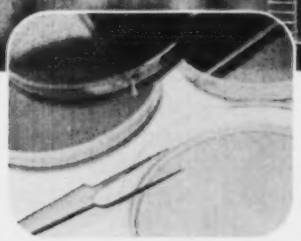
Education

BCCDC is involved in a wide range of education activities through its various divisions, including training health professionals and providing reliable and current public health information to the general public.

Research

Research at BCCDC reflects a commitment to innovation in public health services. Basic research focuses on vaccine discovery for flu, whooping cough and chlamydia, genetic characterization of new and emerging disease agents such as Cryptococcus and Norwalk-like virus and mathematical modeling of major communicable disease problems such as hepatitis C and syphilis. Applied research focuses on cost-effective evaluation of public health interventions such as drinking water and source protection, vaccination, disease outbreak recognition and control, and antimicrobial treatment of communicable diseases. BCCDC in partnership with developing nations is involved in CIDA sponsored global health research to prevent and control AIDS, STDs and TB. Research generates more than $3 million annually in contract and grant awards.

We Strive to Meet or Exceed Our Client's Expectations.



Corporate Performance

BCCDC's Mission and Vision

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Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub Goal A - Elimination

Through the application of evidence based public health policies eliminate endemic transmission of communicable diseases - diphtheria, measles, mumps, polio, rubella, Haemophilus influenzae type b (Hib), hepatitis B and syphilis.

Strategy

- In partnership with Health Authorities, health care providers and consumers achieve 95% childhood vaccination rates at age 2 and 7 years. These programs to include: measles, mumps, rubella, diptheria, tetanus, polio, pertussis, Hib and hepatitis B.
- Introduce the new childhood immunization programs Meningococcal C conjugate for children aged 1 year and grade 6 students, and Pneumococcal conjugate vaccine for infants
- Through the use of best practice initiatives increase the proportion of communicable disease cases found and successfully treated.

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub Goal B - Control

Strategy

- Through partnerships develop, implement, evaluate and continuously improve preventive and care management strategies in order to achieve best practice in the prevention, detection, control, and treatment of communicable diseases in the BC population.
- Use aggressive case finding and treatment methodologies for communicable diseases, which are not amenable to vaccine prevention but are possible to eradicate through other prevention and treatment methodologies.

Corporate Performance

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub Goal C - Environment

Through the application of evidence based public health policies reduce the adverse impact of environmental hazards on human health.

Strategy

- With the transfer of the Environmental Health and Toxicology function from the Ministry of Health Planning, establish an Environmental Health service centre at BCCDC.
- Support the Health Authorities with environmental health expertise in order to prevent disease caused by adverse effects of the environment.
- Continue to support the policy and regulatory function of the Ministry of Health Planning.
- In conjunction with the WCB, explore the development of an occupational health capacity.
- Strengthen and develop academic and research ties with British Columbia post secondary institutions to enhance science related to environmental health in British Columbia.
- Develop surveillance and information management capacity related to environmental hazard identification, the impact of the environment on human health and the effectiveness of various prevention and abatement strategies.
- Identify opportunities for improved efficiency and effectiveness of environmental health services internal and external to BCCDC.

Goal Two:

Detect and Respond to New Disease Threats

Develop the institutional mechanisms to rapidly recognize and respond to emerging microbial and non-microbial disease threats to health, including water and food borne disease outbreaks, pandemic influenza, Bioterrorism, SARS, West Nile, and other new unknown emergent infectious disease agents.

Strategy

- Monitor worldwide patterns of emerging communicable disease threats.
- Strengthen surveillance capacity by:
  - ~ Initiating programs for surveillance of West Nile Virus
  - ~ Improving existing tracking of vaccine associated adverse effects
  - ~ Enhance surveillance to track serogroup specific invasive pneumococcal infections as the immunization program is initiated
- Develop innovative laboratory techniques to molecularly fingerprint microorganisms of public health significance.
- Compare recently developed alert functions and apply them to information systems tracking disease and vaccine associated adverse effects
- Promote and support regional pandemic and related outbreak emergency planning and rapid response capability
- Pilot the approach of employing a broad scientific collaborative to develop novel tools to control emerge disease threats such as SARS.
- Compare recently developed alert functions and apply them to information systems tracking disease and vaccine associated adverse effects
- Promote and support regional pandemic and related outbreak emergency planning and rapid response capability.
- Ensure the maintenance and development of appropriate human resources to undertake effective surveillance, outbreak investigation and response coordination.
- Provide expert "state of the art" scientific consultation in Environmental Health and Toxicology in support of the Ministries of Health Planning and Health Services, Health Authorities, and other stakeholders such as WCB, and other government Ministries, municipalities, individuals and community groups.
- Develop and implement surveillance to detect SARS and other respiratory viral infections.

Corporate Performance

Goal Three:

Develop and Apply Advanced Informatics

Develop and apply advanced surveillance systems for alert and performance monitoring purposes in public health.

Strategy

- Enhancement of comprehensive provincial public health information systems (PHIS).
- Evaluate and improve utilization of the PHIS Outbreak Module and establish province wide reporting of GI outbreaks, vaccine associated adverse events, and rabies post exposure prophylaxis.
- Provide timely web based access to health information for consumers and health care providers.
- Integrated prevention and care information management capacity for communicable diseases pilot tested through Hepatitis initiative.
- Collaborate with Provincial Health Services Authority Executive Director of Population Health Surveillance and Disease Control Planning to develop new management practices to enhance population health server planning.
- Collaborate with Provincial Health Services Authority Quality and Access Committee to develop effective indicators.

Goal Four:

Create Knowledge Through Applied Research and Innovation

Discover research findings of international significance that contribute to evidence based policy and practice that results in improved health for British Columbians.

Strategy

- Develop and implement a Research Plan that optimizes external funding and supports the strategic Vision, Mission, and Goals of BCCDC and the Provincial Health Services Authority.
- Create an environment that is supportive of research and facilitates effective collaboration with other scientific institutions and researchers in BC, Canada, and internationally.
- Ensure Ministry of Health Services and Planning, Health Authorities, public health users, clients and other stakeholders are able to benefit from, contribute to, and influence research priorities at BCCDC.
- Strengthen integration of research in the areas of surveillance, mathematical modeling, molecular microbiology, economics, and program evaluation in order to better serve evidence based public health policy and practice
- Foster and develop academic relation with UBC.
- Produce a phase one mathematical model that describes hep C virus dynamics in the population.
- Pilot the approach of employing research as a broad scientific collaborative to develop novel tools to control emergent disease threats such as SARS.

Goal Five:

Advance Public Health Excellence

Promote and develop highly qualified persons to sustain and support state of the art public health services throughout the province.

Strategy

- Provide training to health providers, public, patients, clients and other stakeholders.
- Support continuing education of our existing staff with an emphasis on advanced informatics and Best Practices in communicable disease prevention and treatment.
- Collaborate with educational institutions throughout the province to support and attract future public health professionals.
- Recruit, retain and reward highly qualified staff.
- Develop a training and mentorship centre to support, patients, families, healthcare providers and students in the prevention, and treatment of hepatitis.

Goal Six:

Provide Leadership and Create Partnerships

Provide provincial / national leadership and create alliances in order to facilitate the development of an effective integrated public health system for British Columbia and Canada.

Strategy

- Promote BC's contribution to national public health infrastructure.
- Support development of national networks to achieve effective collaboration in addressing public health challenges.
- As a member of the Provincial Health Services Authority provide Health Authorities and practitioners with access to tertiary public health expertise, leadership, and support resources and champion evidence based public health practice throughout the province.
- Provide expert public health surveillance and policy advice to the Provincial Health Officer and related government ministries.
- Strengthen a population health approach to the prevention of disease and the promotion of health.
- Focus attention on the health status of aboriginal populations and engage stakeholders in efforts to improve health status.
- Provide leadership in the epidemiological understanding of disease and the effectiveness of population based intervention strategies.
- Work with the Provincial Health Officer in development of core public health functions and creation of new legislation to support public health.
- Partner with public and private sector to validate clinically new tests of public health importance
- Provide international public health leadership.

Performance and Accountability Framework

BC Centre for Disease Control is collaborating with the University of British Columbia and Simon Fraser University concerning the national interest in developing schools of public health.

BC Centre for Disease Control will facilitate the development of Core Programs and collaborate with the Ministry of Health in the development of a new Public Health Act, as well as support Provincial efforts through the National Public Health Initiative.

Through the BC Centre for Disease Control assist regional Health Authorities to achieve their expected performance targets to increase the rates of immunization.

BC Centre for Disease Control in collaboration with the Provincial Health Services Authority information management services will continue the development and implementation of the web based public health information system (iPHIS).

Expected new regulation from the Ministry of Health will result in increased costs for meat inspection, as well as an anticipated increase in Canadian Food Inspection Agency (CFIA) fees. Costs above current funding are estimated to be $1.265M in 2004/05 and an additional $223k in 2005/06. The plan assumes costs will be recovered or funded by the ministry. BC Centre for Disease Control is collaborating with the Ministry of health on implementing new meat legislation.

BC Centre for Disease Control continues to create internal efficiencies and maximize utilization of resources. (i.e. management of drug costs, management of lab supplies.)

Collaboration with Provincial Health Services Authority partners BC Centre for Disease Control aims to improve the efficiency and effectiveness of lab services, sustain and strengthen the capacity of labs to support public health functions and upgrade lab information systems.

BC Centre for Disease Control will continue to coordinate disease management and conduct surveillance testing to respond to West Nile Virus threat and other emerging diseases.

BC Centre for Disease Control, with partners, will continue to promote the development of a SARS vaccine.

Expansion of the vaccine returns program by working closely with Health Authorities on vaccine returns.

BC Centre for Disease Control will develop short-term revenue through water testing and services provided for immigration, Health Canada and others.

Corporate Tactical Objectives

The following Corporate Tactical Objectives have been set to further enhance BCCDC's performance.

1. Evolve and Grow BCCDC

In order to support BCCDC's Mission opportunities for growth and development must be managed so as to ensure resources are appropriately allocated to core functions and priorities. In the face of competing interests, funding pressures and opportunities, priorities and funding strategies will be clarified.

2. Establish Environmental Health Centre

While various environmental health services have been transferred to BCCDC in recent years the role, accountability, organization and resource requirements of the environmental health function at BCCDC have not been finalized. With the impending development of the National Collaborating Centre for Environmental Health at BCCDC the National and Provincial Environmental Health roles, responsibilities, and functions will be clarified.

3. Increase Collaboration/Outreach with Health Authorities and Other Partners

Although there is strong external support for BCCDC, there are opportunities for further engagement of the Health Authorities and other public health partners. A number of initiatives will be undertaken to enhance collaboration and support of the Health Authorities and other public health partners.

4. Improve Internal Collaboration/Communication

While there are numerous examples of divisional collaboration, it was felt that further development could occur by bringing together teams to identify initiatives that would generate added value through cross divisional collaboration, for example in such areas as nursing and analytical and research specialists who are often working in isolation within particular divisions.

5. Improve Internal Operations

In order to improve internal operations a number of initiatives will be implemented including improved co-ordination of reporting requirements, enhanced fiscal accountability systems, financial forecasting and performance monitoring.

6. Improve Staff Support/Focus

Staff determines the capacity and quality of BCCDC's service. Communications, staff training and development planning, and employee recognition will be strengthened at BCCDC.

Communicable Diseases

Communicable Diseases

Communicable diseases are caused by viruses, bacteria, parasites and fungi. Common modes of transmission are respiratory (measles, tuberculosis), sexual (HIV, chlamydia), blood borne (hepatitis B and C), fecal-oral (salmonella, shigella), vector-borne (Lyme disease, malaria) and waterborne (giardiasis, cryptosporidiosis).

As specified in schedules A and B of the Health Act, Communicable Disease Regulations and the Venereal Disease Act, cases and outbreaks of communicable diseases are reported to BCCDC by the Medical Health Officers in the province. BCCDC maintains, monitors and acts on the data on behalf of the Provincial Health Officer.

Provincial registries of active cases of tuberculosis, reportable cases of sexually transmitted diseases (STDs), meningitis, hantavirus pulmonary syndrome, leprosy and other reportable communicable diseases are maintained by BCCDC.

Epidemiology Services

Dr. David Patrick, *Director, Epidemiology Services*

Epidemiology Services monitors and investigates communicable disease as it affects the population of British Columbia.

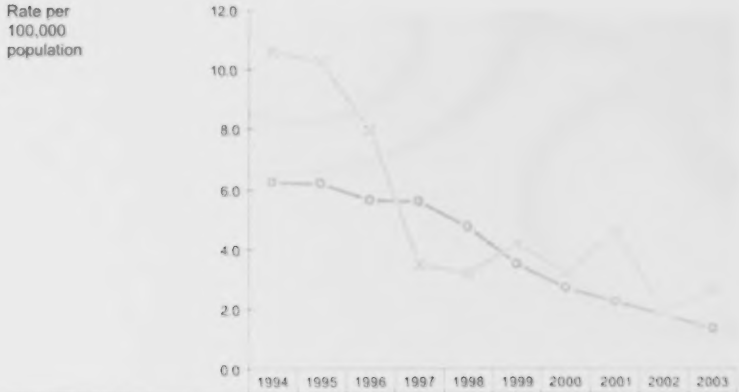
Information on reportable and non-reportable cases of communicable disease are used by Epidemiology Services to evaluate trends in incidence, identify emerging populations at risk, identify outbreaks and initiate control measures for reducing the spread of disease. Findings are communicated to public health officials, institutions and communities.

Biologicals for all provincially funded immunization programs are managed by Epidemiology Services and evaluated for effectiveness and adverse reactions. Newly licensed vaccines are evaluated prior to introduction to the publicly funded immunization program.

Epidemiology Services is also responsible for the development of policies and procedures for communicable disease control in the province and serves as a key source of consultation for others involved in communicable disease prevention, control and population based research.

In conjunction with the University of British Columbia (UBC) and Health Canada, Epidemiology Services is a training site for Federal Field Epidemiologists and UBC, trainees in postgraduate programs and carries out applied public health research of direct relevance to its mission.

Acute Hepatitis B Rates by Year, 1994-2003



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
BC Hepatitis B Acute Reports	230	234	219	220	189	141	109	92	75	57
BC Hepatitis B Acute Rate	6.2	6.2	5.6	5.6	4.7	3.5	2.7	2.2	1.8	1.4
Canadian Hepatitis B Rate	10.6	10.3	8.0	3.5	3.2	4.2	3.2	4.6	1.9	2.7

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub Goal A – Elimination

Through the application of evidence-based public health policies, eliminate endemic transmission of communicable diseases, such as – diphtheria, measles, mumps, polio, rubella, Haemophilus influenzae type b (Hib), hepatitis B and syphilis.

Epidemiology will specifically:

Work toward reductions in invasive meningococcal group C disease and invasive pneumococcal diseases in children, pertussis among 10-14 year olds and varicella in the general population.

Strategy

- In partnership with Health Authorities, health care providers and consumers provide childhood immunization. These programs to include coverage for: measles, mumps, rubella, varicella, diphtheria, tetanus, polio, pertussis, Hib and hepatitis B, meningococcal C disease and pneumococcal disease
- Influenza immunization for the elderly, those with chronic diseases, infants between the ages of 6 and 23 months and for health care workers
- Review and improve upon current methods for assessment of immunization coverage
- Devise and implement strategies to improve immunization coverage
- Upgrade information systems to allow for generation of reminders for parents of children who have missed immunization milestones
- Improve quality of nursing practices for immunization
- Maintain affordable vaccine prices through bulk purchase of vaccines for publicly funded programs
- Report progress towards enhancing surveillance for vaccine safety and improvement of vaccine registries
- Develop an immunization recertification program for public health nurses
- Collaborate with BCCDC Environmental Health function and PHSA Population Health Division to identify opportunities for integrating disease epidemiological information across the BC population.

Corporate Level Objectives and Performance Measures Related to Sub-Goal 1-A

2004 – 05 Objectives	Performance Measure
95% childhood vaccination rates at age 2 and 7 years	Immunization rates
90% influenza immunization of residents in long term care facilities	Immunization rates
Develop and implement new immunization program for varicella vaccine in Health Authorities	Immunization rates by Health Authority
Implement new immunization program for Meningococcal C conjugate vaccine for infants, children aged 1 year and grade 6 students	Immunization rates by Health Authority
Reduce pertussis among 10-14 year olds through the introduction of a preadolescent booster dose of TdaP (pending approval by the Ministry)	Pertussis rates / % increase / decrease

Epidemiology Services

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal B – Control

Through the application of evidence based public health policies, achieve effective control for diseases such as, tuberculosis, HIV, hepatitis A and C, chlamydia, gonorrhea, influenza and pertussis.

Please see above for approach to influenza, pertussis and other vaccine preventable diseases.

Sub-Goal C – Environment

Through the application of evidence based public health policies, reduce the adverse impact of environmental hazards on human health.

Corporate Level Objectives and Performance Measures Related to Sub-Goal 1-B and Sub-Goal 1-C

2004 – 05 Objectives	Performance Measure
Preliminary study of the benefits of the development of an integrated epidemiological surveillance function across communicable and non-communicable diseases in the BC population in order to better monitor and understand preventable diseases in the BC Population	Report to PHSA

Goal Two:

Detect and Respond to New Disease Threats

Enhance and apply mechanisms to rapidly recognize and respond to emerging microbial and non-microbial disease threats to human health, including water and food borne disease outbreaks, pandemic influenza, bioterrorism, SARS, West Nile Virus and Norovirus, and other new emergent infectious disease agents.

Strategy

- Maintain the human resources and expertise required to fully investigate outbreaks of communicable disease
- Strengthen surveillance capacity by:
  - ~ refining programs for surveillance of West Nile Virus
  - ~ improving existing tracking of vaccine associated adverse effects
  - ~ enhance surveillance to track serogroup specific invasive pneumococcal infections as the immunization program is initiated
- Compare recently developed communicable disease alert functions and apply them to information systems tracking disease and vaccine associated adverse events
- Promote and support regional pandemic and related outbreak emergency planning and rapid response capability
- Pilot the approach of employing a broad scientific collaborative to develop novel tools to control emergent disease threats such as SARS

Corporate Level Objectives and Performance Measures Related to Goal 2

2004 – 05 Objectives	Performance Measure
Tracking and reporting system developed for West Nile Virus in birds, mosquitoes, and humans established	Tracking system providing advanced warning of human risk virus exposure.
Invasive pneumococcal disease tracked and analyzed	Inclusion of serogroup data on invasive pneumococcal disease reported in next annual CD Report
Development of a system whereby all CD and vaccine adverse event data are routinely reviewed using an automated alert system	System established providing comprehensive adverse event information for all Health Authorities
Provision to regions of templates they will need to complete regional and local pandemic and bioterrorism preparedness planning	Templates adopted and utilized by all Health Authorities
Establish a scientific collaborative to address SARS	At least two relevant publications are produced by the collaborative which are accepted or published by peer reviewed journals
Maintenance of critical FTE allotments in epidemiology	Year over year staffing ratio

Epidemiology Services

Goal Three:

Develop and Apply Advanced Informatics

Develop and apply advanced surveillance systems for alert and performance monitoring purposes in public health.

Strategy

- Follow through with iPHIS implementation and strengthen surveillance capacity
- Secure historic vaccine associated adverse event data reported in British Columbia from Health Canada for trend analysis and testing of aberration detection methods
- Provide timely web based access to disease information for the public, consumers and health care providers
- Public Health Laboratories networks linking private and public laboratories to case data via PHIS
- Improve the recording of vaccine administration at point of service
- Expand the PHIS Surveillance Working Group membership to include HSDA representation

Corporate Level Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Evaluate and improve utilization of the PHIS Outbreak Module and establish province wide reporting of GI outbreaks, vaccine associated adverse events, and rabies post-exposure prophylaxis	Number of Outbreaks reported through iPHIS
Reduction of reporting delay from date of laboratory confirmation to date of reporting in iPHIS	Average time taken to report laboratory confirmation into iPHIS system
Pilot the use of bar-coding technology for capturing vaccine administration at the point of service	Electronic reporting of vaccine associated adverse events achieved and barcode pilot evaluated
Complete the PHSA Plan to bring PHIS under better management	iPHIS team operative; budgetary efficiencies being realized

Goal Four:

Create Knowledge Through Applied Research andInnovation

Discover research findings of international significance that contribute to evidence based policy and practice that results in improved health for British Columbians.

Strategy

- Advance BCCDC Research Plan and integrate with the Provincial Health Services Authority research strategy
- Create an environment that is supportive of research and facilitates effective collaboration with other scientific institutions and researchers in BC, Canada, and internationally
- Ensure Ministry of Health Services and Planning, Health Authorities, public health users, clients and other stakeholders are able to benefit from, contribute to, and influence research priorities at BCCDC
- Strengthen integration of research in the areas of surveillance, mathematical modeling, molecular microbiology, economics, and program evaluation in order to better serve evidence based public health policy and practice

Epidemiology Objectives and Performance Measures Related to Goals 4

2004 – 05 Objectives	Performance Measure
10 peer reviewed publications from epidemiology services	# of publications
$0.5 M in grant or contract funded research	$ received
2 graduate students associated with group	# of graduate students engaged
Provision of 2 courses to UBC	# of courses provided

Epidemiology Services

Goal Five:

Advance Public Health Excellence

Attract, develop and retain highly qualified persons to sustain and support state of the art public health services throughout the province.

Strategy

- Provide training to health providers, Health Authorities, public, patients, clients and other stakeholders
- Support continuing education of our existing staff
- Collaborate with educational institutions throughout the province to support and attract future public health professionals and support teaching of undergraduate and graduate health professionals
- Recruit, retain and reward highly qualified staff
- Develop opportunities for all staff to advance their career and contribute to the leadership needs of BCCDC
- Develop communications function to promote public health excellence and knowledge in the health care system and general public

Corporate Level Objectives and Performance Measures Related to Goal 5

2004 – 05 Objectives	Performance Measure
Provide at least 15 continuing education sessions to health care workers	# of continuing education sessions
Each professional staff member to attend at least one academic meeting per annum	inventory of professional staff attendance at academic meetings
2 or more regular staff members working (part-time) toward further post-graduate training	# of staff working on post-graduate training
Find solutions to collective bargaining or HEABC adjustments that will make it easier to recruit and retain highly qualified staff	H.R. policy / and related recruitment and retention capacity to retain appropriately highly qualified staff in place and endorsed by PHSA

Goal Six:

Provide Leadership and Create Partnerships

Provide provincial / national leadership and create alliances in order to facilitate the development of an effective integrated public health system for British Columbia and Canada

Strategy

- Promote BC's contribution to national public health infrastructure
- Support development of national networks to achieve effective collaboration in addressing public health challenges
- Provide expert public health surveillance and policy advice to the Provincial Health Officer and related government ministries
- Focus attention on the health status of aboriginal populations and engage stakeholders in efforts to improve health status
- Provide leadership in the epidemiological understanding of disease and the effectiveness of population based intervention strategies
- Work with the Provincial Health Officer in development of core public health functions and creation of new legislation to support public health

Corporate Level Objectives and Performance Measures Related to Goal 6

2004 – 05 Objectives	Performance Measure
Epidemiology staff to have membership on at least four national or international committees	# of staff participation rate on National Committees
Epidemiology staff to chair at least 2 national or international leadership committees	3 staff chairing national or international leadership committees
Participate in forming new national Epidemiology and Public Health Network committees	Active membership on Epidemiology and Public Health Network committee
Produce Statistical Reports on CD's within the Aboriginal Population	Statistical Report on Aboriginal CD's completed
Liaison visits to Health Authorities	Meetings concluded in at least three health authorities

Vaccine and Pharmacy Services

The Provincial Public Health Pharmacy is dedicated to providing high-quality pharmaceutical services that result in optimal patient outcomes in an environment that encourages excellence, teamwork, innovation and continuous improvement.

Dr. Fawziah Marra,
Director, Vaccine & Pharmacy Services

Mission

The Provincial Pharmacy is dedicated to providing high-quality pharmaceutical services that result in optimal client outcomes in an environment that encourages excellence, teamwork, innovation and continuous improvement. Our goal is to provide safe, cost-effective and efficient pharmaceutical care, one that contributes towards positive client outcomes in specific disease states facilitated by the BC Centre for Disease Control; these include tuberculosis (TB), sexually transmitted diseases (STD's), and biologicals.

Services

Pharmacists work directly with physicians and other healthcare providers to provide pharmaceutical care. They are involved with research projects and with the education of patients, pharmacy students/interns and other healthcare providers. Our Pharmacy technicians play a fundamental role in employing invaluable technological tools such as the automated filling equipment and the BDM® pharmacy information system that are used in managing inventory and distribution. The pharmacy software system also allows our team to maintain client profiles and perform drug evaluations that determine clinical appropriateness. We employ an automated dispensing system for the most routinely prescribed medications. It is a safe and effective way to streamline processes and to minimize dispensing errors by filling medications categorically and in systematic order.

Tuberculosis

Medications for TB are dispensed throughout the Province of BC and the Yukon Territory under the mandate outlined by TB Control. Medications are distributed to patients via chest clinics, health units and affiliated facilities. A patient requiring treatment is provided medications in 30-day-supply intervals so that compliance and adverse reactions may be monitored. The pharmacist reviews the client's drug profile against the prescribed TB medications and checks for appropriate dosing, adverse reactions, and drug interactions. Clients with latent tuberculosis are counseled on their drug therapies by our pharmacists who will also reinforce this need for treatment compliance.

Sexually Transmitted Diseases

Medication units for STD's are supplied to health units, physicians' offices and specialized care service facilities throughout the Province. Each drug is packaged and supplied in a unit appropriate for a course of treatment under the Canadian STD Treatment Guidelines.

Research

Research initiatives include: (1) performing pharmacoeconomic and outcomes analyses for evaluating publicly funded programs which provide antimicrobials for TB and STD management as well as programs in immunization; (2) helping to establish databases to collect information on regional utilization rates of vaccines; (3) developing enhanced surveillance systems for management of vaccine-related adverse reactions; (4) conducting a pilot project for populating the B.C. immunization registry; and (5) tracking antimicrobial utilization rates for the Province of British Columbia.

Education

The department is closely linked with the Faculty of Pharmaceutical Sciences at the University of British Columbia and provides training for undergraduate and postgraduate pharmacy students. Pharmacists also contribute to in-house educational programs for nursing and paramedical personnel.

Biologicals

Biologicals for TB and other immunization programs are provided under the public health mandates endorsed by TB Control and the Communicable Disease Control Immunization Program. The biologicals are managed by the Biologicals Desk, a Pharmacy responsibility that has collaborative partnering with Epidemiology Services. Pharmacy is responsible for purchasing and distributing biological products, addressing cold chain maintenance issues, communicating with the field to minimize and control wastage, and conducting surveillance that would enhance the efficiencies around output volumes. The Biologicals Desk is the Province's resource centre for product information.

Bioterrorism and Pandemic

Pharmacy is involved with the development of policies and procedures around bioterrorism and pandemic influenza including the distribution of vaccines, antibiotics or antiviral agents for mass immunization or medical treatment in response to an event.

Vaccine and Pharmacy Services

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub Goal A

Through the application of evidence-based public health policies eliminate endemic transmission of communicable diseases, such as – diphtheria, measles, mumps, polio, rubella, Haemophilus influenzae type b (Hib), hepatitis b and syphilis.

Strategy

- Evaluate and report on childhood and adult vaccination distribution and utilization rates; vaccines evaluated include diphtheria, tetanus, polio, hemophilus influenzae b, measles, mumps, rubella, pneumococcal, meningococcal, varicella, influenza, hepatitis A, and hepatitis B.
- Increase uptake of the pneumococcal vaccine for chronically ill risk groups between 2-64 years and those ≥ 65 years.
- Develop a vaccine adverse event reporting system for collection and surveillance of data related to vaccine side effects.
- Evaluate and report on utilization of STD/AIDS and TB drugs to identify problems with treatment compliance and to forecast and control costs.
- Evaluate and report on utilization of needles/syringes and condoms to identify problems with needle exchanges and to forecast and control costs.
- Provide patient education of medications used for prevention and treatment of tuberculosis infection and reinforcement of compliance with these medications.

Pharmacy Services Objectives and Performance Measures to Goals 1

2004 – 05 Objectives	Performance Measure
Produce Quarterly Performance Reports on vaccine distribution, utilization and associated costs.	Reports completed to the satisfaction of Epidemiology Division and HOC and Nursing Councils
In conjunction with Epidemiology, explore and implement plans to increase uptake of the pneumococcal vaccine.	Pneumococcal vaccine rates
In conjunction with Epidemiology, initiate collection and analysis of data related to vaccine adverse events.	Conceptual design of the project completed and supported by HOC and Nursing Councils.
Produce Quarterly Performance Reports on STD/AIDS and TB drug utilization	Reports completed to the satisfaction of STD/AIDS and TB Control Divisions and HOC and Nursing Councils
Produce Quarterly Performance Reports on distribution of needles/ syringes and condoms	Reports completed to the satisfaction of STD/AIDS Control and Hepatitis Divisions and HOC and Nursing Councils
Produce Annual Report on results of the patient satisfaction survey and impact of education on treatment completion rates.	Report completed to the satisfaction of TB Control Division. Patient satisfaction and education target met.

Sub Goal B

Through the application of evidence based public health policies achieve effective control for diseases such as tuberculosis, HIV, hepatitis A and C, chlamydia, gonorrhea, influenza and pertussis.

Please see above.

Sub Goal C

Through the application of evidence based public health policies reduce the adverse impact of environmental hazards on human health.

Goal Two:

Detect and Respond to New Disease Threats

Enhance and apply mechanisms to rapidly recognize and respond to emerging microbial and non-microbial disease threats to human health, including water and food borne disease outbreaks, pandemic influenza, Bioterrorism, SARS, West Nile and Norovirus, and other new emergent infectious disease agents.

Strategy

- Support the development of a bioterrorism mass immunization and antibiotic response plan.
- Support the development of a pandemic influenza mass immunization and antiviral response plan.
- Promote the development of a plan on the pharmacists' contribution in an emergency event.
- Collaborate with Tuberculosis Control to monitor and ensure patient adherence to appropriate treatment to Multi Drug Resistant (MDR) TB.

Pharmacy Services Objectives and Performance Measures to Goal 2

2004 – 05 Objectives	Performance Measure
Draft Plan for antibiotics stockpiling and distribution for bioterrorism and antiviral distribution for pandemic flu.	Plan completed and accepted by Epidemiology and Health Authorities.
Draft Plan for acquisition and distribution of vaccines for bioterrorism and pandemic flu.	Plan completed and accepted by Epidemiology and Health Authorities.
100% therapeutic drug monitoring of MDR TB Patient to ensure adequate serum concentration.	Monitoring rates.

Vaccine and Pharmacy Services

Goal Three:

Develop and Apply Advanced Informatics

Develop and apply advanced surveillance systems for alert and performance monitoring purposes in public health.

Strategy

- In conjunction with Information Management and other PHSA institutions, formulating a fully integrated computerized drug usage reporting system for STD and TB medications which will evaluate the number of prescriptions filled, track actual costs, and projected annual expenditures.
- Formulate a fully integrated computerized drug usage reporting system for vaccine, needles/syringes and condom distribution which will evaluate the number of products distributed, track actual cost, and project annual expenditures.
- Pilot the use of hand-held inventory control systems in the field.

Pharmacy Services Objectives and Performance Measures to Goal 3

2004 – 05 Objectives	Performance Measure
Biologicals utilization report covering diphtheria, tetanus, polio, hemophilus influenzae b, measles, mumps, rubella, pneumococcal, meningococcal, varicella, influenza, hepatitis A, and hepatitis B to track usage and costs.	# of vaccines effectively tracked, costed and managed.
STD drug utilization report covering amoxcillin, azithromycin, doxcycline, penicillin G benzathine, erythromycin, metronidazole, spectinomycin, cefixime and ciprofloxacin in order to track patient compliance and control costs.	# of STD Drugs effectively, tracked, costed and managed.
TB drug utilization report covering isoniazid, rifampin, pyrazinamide, ethambutol, ciprofloxacin, levofloxacin, and BCG vaccine in order to track patient compliance and control costs.	# of TB Drugs effectively, tracked, costed and managed.
NEX program utilization report covering needles/ syringes, condoms, lubricants, sterile water in order to track number of exchanges and control costs.	# of NEX program components effectively, tracked, costed and managed.

Goal Four:

Create Knowledge Through Applied Research and Innovation

Discover research findings of international significance that contribute to evidence based policy and practice that results in improved health for British Columbians.

Strategy

- Advance BCCDC Research Plan and integrate with the Provincial Health Services Authority research strategy.
- Create an environment that is supportive of research and facilitates effective collaboration with other scientific institutions and researchers in BC, Canada, and internationally.
- Encourage professional staff to apply for research grants, present their findings at national and international conferences, publish in peer-review journals, and apply for awards.
- Strengthen integration of research in the areas of antibiotic utilization, adverse event monitoring, cost-effectiveness of drugs and biologicals, and pharmacogenomics in order to better serve evidence based public health policy and practice.

Pharmacy Services Objectives and Performance Measures to Goal 4

2004 – 05 Objectives	Performance Measure
Undertake an analysis of antibiotic utilization in the province	Epidemiology and PHO acceptance of analysis and recommendations
Undertake a cost-effectiveness analysis for implementation of the new vaccine programs.	Epidemiology and PHO acceptance of analysis and recommendations
Undertake an analysis of adverse drug reactions for TB medications	TB Control and PHO acceptance of analysis and recommendations
Receive at least one grant per year.	# of grants
Produce at least one scientific paper for publication.	# of publications

Vaccine and Pharmacy Services

Goal Five:

Advance Public Health Excellence

Attract, develop and retain highly qualified persons to sustain and support state of the art public health services throughout the province.

Strategy

- Provide support for continued education of staff.
- Create efficiency in the distribution system in order to increase pharmacist time for more patient-related activities.
- Continue improving on turn-around time and accuracy of drugs being distributed by the BCCDC pharmacy.
- Provide the most cost-effective transport of pharmaceuticals to allow for safe and efficient delivery of the provincially administered programs centralized by the BCCDC.
- Promote "tech-check" by pharmacy technicians to allow the pharmacist to focus on clinical monitoring of drug outcomes.
- Track transport costs of all medications being sent from the pharmacy by creating year-to-date reports on a quarterly basis.

Pharmacy Services Objectives and Performance Measures to Goal 5

2004 – 05 Objectives	Performance Measure
Achieve dispensing turn-around time of one week for TB and STD orders, 15 minute over the counter for leprosy orders and 48 hours by mail, and 48 hours for biologicals and 4 hours for emergency drugs e.g. rabies vaccine.	Turn around times Implement "tech-check" programs
Achieve adequate workload for staff	Workload statistics for the pharmacists, technicians and biologicals clerk Number of transactions (ie new prescriptions, refills and stock movements) per month
Support staff continuing education.	# of hours. Year over year % increase
Achieve a zero dispensing error rate.	Error rate.

Goal Six:

Provide Leadership and Create Partnerships

Provide provincial / national leadership and create alliances in order to facilitate the development of an effective integrated public health system for British Columbia and Canada.

Strategy

- Continue to forge alliances with other divisions within the BCCDC, Faculty of Pharmaceutical Sciences at the University of British Columbia, College of Pharmacists, BC Pharmacists Association, Canadian Society of Hospital.
- Pharmacists, Health Canada and other national and international organizations.
- Establish alliances with Pharmacy Services within PHSA and the five regional Health Authorities.

Pharmacy Services Objectives and Performance Measures to Goal 6

2004 – 05 Objectives	Performance Measure
Establish two joint initiatives with external partners.	# of joint initiatives
Membership on a minimum of two external committees.	# of committees
A minimum of two conference or training presentations to external stakeholders.	# of presentations

Hepatitis Services

Dr. Mel Krajden, *Director, Hepatitis Sevices*

Program Structure

BC Hepatitis Services brings together clinicians, scientists, educators, health and social service agencies and consumers to develop and implement best practices for integrated hepatitis prevention and care management within British Columbia

Hepatitis Issues

- 40,000 hepatitis C virus chronic infections in BC
- 40,000 hepatitis B virus chronic infections in BC
- 15-30% will die or require transplantation over 10-30 years
- New, expensive therapies can improve outcomes or even cure infections
- Integrated, cost-effective solutions are required

Program Goals

- To reduce the harmful effects of Hepatitis B and C in those already infected by employing best practices to treat and/or cure hepatitis
- Reduce the incidence of Hepatitis A and B by 25%, and Hepatitis C by 10% in BC within 5 years
- Integration of client-focused and cost-effective services
- Develop models for effective integrated health services
- Model, test and refine best practices in diverse settings throughout BC

Activities include developing and/or supporting quality improvement/research initiatives such as:

- An interdisciplinary education, training and mentoring program
- A health advocacy program to assist patients/families to clearly articulate their needs
- Support clinical practice guidelines development and processes for updating
- Integrated prevention and care management programs
- Statistical models to inform decision making, track indicators and monitor best practices
- CIHR funded research
- Clinical and public health databases to track outcomes

Lessons Learned

- We need to share knowledge about the best practices to guide prevention and care decisions
- Prevention for vaccine treatable illnesses e.g., Hepatitis A and B requires systematic vaccination of at-risk populations
- For agents such as hepatitis C, where no vaccine exists, comprehensive harm reduction strategies are necessary
- Health care silos can be integrated
- Models of integrated prevention and care must be tailored to social, economic and regional needs
- Issues of managing chronic hepatitis reach far beyond the disease

Acute Hepatitis B Rates by Age Group and Sex, 2003

Rate per 100,000 population

	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+
Hepatitis B: Acute Reports – Female	0	0	0	0	0	0	1	5	5	1
Hepatitis B: Acute Reports – Male	0	0	0	0	1	0	6	15	15	8
Hepatitis B: Acute Rate – Female	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.6	0.8	0.2
Hepatitis B: Acute Rate – Male	0.0	0.0	0.0	0.0	0.7	0.0	4.4	4.8	2.4	2.3

Hepatitis Services

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Through the application of evidence-based public health policies achieve effective control of Hepatitis A and C and eliminate local transmission of Hepatitis B.

Sub Goal A

Reduce the hepatitis A infection rate from 3.3 in 2000 to less than 2.0 cases per 100,000 population. Reduce the acute hepatitis B infection rate from the current 2.8 in 2000 to less than 2.0 cases per 100,000 population. Monitor the acute hepatitis C infection rate and reduce the overall hepatitis C infection rate from 119 in 2000 to less than 100 cases per 100,000 by 2006.

Strategy

1 Monitor hepatitis A incidence rates and encourage immunization in high-risk adults.

2 Monitor acute hepatitis B incidence rates, evaluate universal infant vaccination program in partnership with health authorities, and encourage immunization among high-risk populations.

3 Monitor acute hepatitis C incidence rates.

4 Facilitate implementation of hepatitis A and C prevention and treatment by building capacity for training and education through the regional demonstration projects.

5 Focus risk reduction initiatives on high-risk sub-populations including Aboriginal peoples, incarcerated individuals and immigrants from endemic regions.

6 Develop and coordinate multifaceted education and mentorship programs for healthcare professionals.

Update: Vancouver Coastal Health partnership is targeting more intensive follow-up of infants born to Hepatitis B chronic carrier mothers. Vancouver Hospital Health Sciences Centre (VHHSC, GI Division) partners have completed a cross-sectional study on knowledge of Hepatitis B in the Chinese Canadian community. Fraser Health Authority partnership with Correctional Service Canada is testing inmates for HBV, HCV, and HIV.

Hepatitis Services Objectives and Performance Measures Related to Goal 1-A

2004 – 05 Objectives	Performance Measure
Achieve immunization coverage of at least 80% in targeted groups.	Evaluation of vaccine uptake.
Maintain acute hepatitis B incidence rates at or below 2.0 cases per 100,000 population.	Incidence rates per 100,000 population.
Achieve an acute hepatitis C incidence rate at or below 100.0 cases per 100,000 population.	Incidence rate per 100,000 population.
Support the regional demonstration projects in the development of educational/training sessions.	Number of education/training sessions provided by the regional demonstration projects.
Continue education and health promotion activities through partnerships. Extend the program reach by developing strategies in at least 2 of the 5 regional demonstration projects.	Number of regional demonstration projects with risk-reduction strategies targeting high-risk populations.
Plan and provide a three-day Interdisciplinary Viral Hepatitis Workshop for health care professionals.	Satisfaction ratings by workshop participants and implementation of mentorship programs
Develop and implement a mentorship program at the Vancouver Hospital and Health Services Centre (VHHSC) for students, nurses, pharmacists and physicians.	Implementation of a mentorship program.

Goal Two:

Detect and Respond to New Disease Threats

Divisional Objective:

Enhance detection and reporting of acute hepatitis C.

Strategy

1 Integrate lab testing and reporting with acute hepatitis C enhanced surveillance and case tracking to facilitate case identification and collection of epidemiological

2 Ensure all laboratory identified acute cases of hepatitis C are reported into the Public Health Information System (PHIS).

3 Improve surveillance linkages with laboratories performing hepatitis virus diagnosis throughout the province.

4 Describe optimal diagnostic algorithms for the diagnosis and management of acute hepatitis C virus infection.

Hepatitis Services Objectives and Performance Measures Related to Goal 2

2004 – 05 Objectives	Performance Measure
Report laboratory data in conjunction with risk factors to provide more reliable estimates of current causes of hepatitis C infection.	Accurate and comprehensive documentation of current causes of acute hepatitis C infections.
Achieve a 90% PHIS reporting rate.	All diagnosed cases to be reported into PHIS.
Actively participate in primary care reform, lab reform, and information management reform.	Creation of fully-linked laboratory record of hepatitis laboratory tests.
Develop new diagnostic algorithm, and update clinical guideline.	Development of new diagnostic algorithm and updated clinical guideline.

Hepatitis Services

Goal Three:

Develop and Apply Advanced Informatics

Divisional Goal:

Develop and apply advanced surveillance systems for alert and performance monitoring purposes in public health.

Divisional Objective:

Develop an integrated database that captures 95% of persons with a laboratory confirmed diagnosis of hepatitis C in order to track treatment and infection rates, monitor specific outcomes and assess clinical strategies for cost-effectiveness.

Strategy

1 Evaluate and track the response to pegylated interferon/ribavirin treatment for hepatitis C.

2 Define and report on the demographics of hepatitis C cases in BC to better define the burden of disease.

3 Measure regional demonstration projects' hepatitis clinic capacity and outcomes.

Hepatitis Services Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Link Pharmacare treatment information with laboratory results.	Report describing interim treatment outcomes.
Obtain and analyze demographic hepatitis C case data.	Report describing burden of hepatitis C infection.
Develop a report card system to report regional demonstration projects' activities and outcomes.	Percentage of users satisfied with report card.

Goal Four:

Create Knowledge Through Applied Research and Innovation

Divisional Goal:

Discover research findings of international significance that contribute to evidence-based policy and practice that result in improved health for British Columbians.

Strategy

1 Produce a phase one mathematical model that describes hepatitis C virus dynamics at a population level.

2 Estimate the overall burden of disease in BC from a cumulative analysis of persons undergoing hepatitis C treatment at VHHSC and persons identified as being hepatitis C infected through laboratory testing.

Hepatitis Services Objectives and Performance Measures Related to Goals 3

2004 – 05 Objectives	Performance Measure
Develop a functional model and conduct initial assessments of the impact of best practices on the burden of hepatitis C infection in BC.	Assessment results.
Describe the available clinical and demographic characteristics of hepatitis C cases in the general BC population compared to those undergoing treatment at VHHSC and document the burden of disease.	Compilation of a report describing results.

Hepatitis Services

Goal Five:

Advance Public Health Excellence

Divisional Goal:

Attract, develop and retain highly qualified persons to sustain and support state-of-the-art public health services throughout the province.

Divisional Objective:

Define, update regularly and implement hepatitis management practices throughout BC.

Strategy

1 Develop educational tools that can be used by consumers, patients, voluntary agencies, social services and health care providers.

2 Estimate the overall burden of disease in BC from a cumulative analysis of persons undergoing hepatitis C treatment at VHHSC and persons identified as being hepatitis C infected through laboratory testing.

Hepatitis Services Objectives and Performance Measures Related to Goal 4

2004 – 05 Objectives	Performance Measure
Educate others in the use of the Advocacy Training Program.	Completion of a minimum of 4 training sessions throughout BC.
Provide vital hepatitis training to public health nurses from across the province.	Number of training sessions offered.

Goal Six:

Provide Leadership and Create Partnerships

Divisional Goal:

Provide provincial/national leadership and create alliances in order to facilitate the development of an effective integrated public health system for British Columbia and Canada.

Divisional Objective:

Continue developing alliances and partnerships within the PHSA and with community groups, consumer organizations, Health Authorities, Health Canada, Ministries of Health and the Canadian Viral Hepatitis Network to discover and promote hepatitis prevention and care.

Strategy

1 Support renewal of the national Health Canada Initiative on Hepatitis C and its collaboration with CIHR.

2 Support the multi-stakeholder Provincial Hepatitis Advisory Committee (PHAC).

Hepatitis Services Objectives and Performance Measures Related to Goal 5

2004 – 05 Objectives	Performance Measure
Secure CIHR/Health Canada Research Initiative on Hepatitis C funding for an additional five years (2005-2010).	Funding secured.
Organize an annual meeting of the Provincial Hepatitis Advisory Committee (PHAC) with 75% attendance and maintain communication on relevant issues.	Annual PHAC meeting held.

Laboratory Services

Five year goals are: To be leaders in Molecular Services, To be leaders Laboratory Quality Management Systems, and To be leaders in Informatics.

Dr. Judith Isaac-Renton, *Director, Laboratory Services*

Laboratory Services is a public health leader in British Columbia's laboratory network. Our work is organized supported by 3 programs (Biohazard Containment and Infection Control, Research and Development and Quality Management) and within 5 discipline-based Clusters (Bacteriology, Environmental Services including Enterics, Food and Water Health, TB/Mycobacteriology, Virology, Zoonotic and Emerging Pathogens).

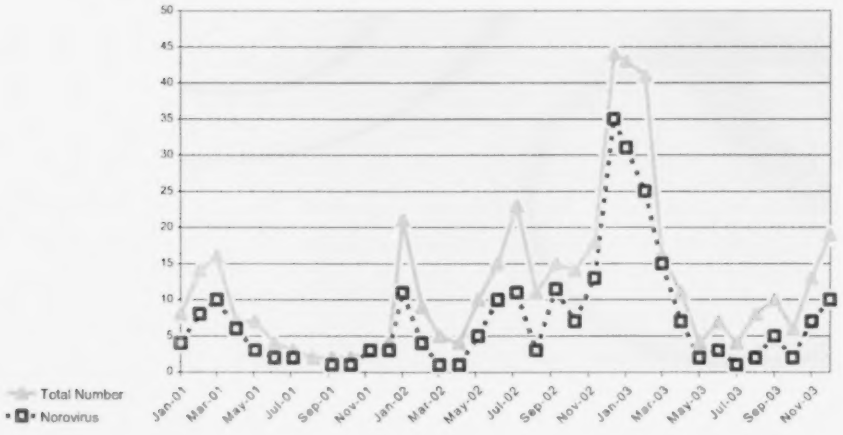
Five year goals are: To be leaders in Molecular Services, To be leaders Laboratory Quality Management Systems, and To be leaders in Informatics.

Our mandate is integrated and broad. We support public health policy development; we support provincial state-of-the-art communicable disease diagnostic and reference services; we provide expert clinical and technical consultations; we develop, evaluate and introduce new technologies; we respond to threats to the public health including outbreak detection and management.

Strategically, we focus on on Molecular Services, Quality Management and our nationally recognized Biohazard Containment Services. Rapid systematic advances across all fronts has enabled Laboratory Services to become a nationally recognized state-of-the-art public health and reference microbiology laboratory.

Laboratory Services is a large multidisciplinary team of highly trained experts including: medical technologists, clerical staff, laboratory physicians, infection control practitioners and other specialists. We partner with all medical microbiology laboratories in British Columbia and with public health laboratories across Canada through the Canadian Public Health Laboratory Network.

2001/2002/2003 Total Reported Gastroenteritis Outbreaks & Norovirus Outbreaks



Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal A – Elimination

Sub-Goal B – Control

Sub-Goal C – Environment

- Through the application of evidence based public health policies, eliminate endemic transmission of communicable diseases, such as diphtheria, measles, mumps, polio, rubella, Haemophilus influenzae type b (Hib), hepatitis B and syphilis
- Through the application of evidence based public health policies achieve effective control for diseases such as tuberculosis, HIV, hepatitis A and C, chlamydia, gonorrhea, influenza and pertussis
- Through the application of evidence based public health policies, reduce the adverse impact of environmental hazards on human health

Strategy

- Improve laboratory alliance's throughout British Columbia
- Link directly with key laboratory clients in all Health Regions
- Develop novel approaches for laboratory based surveillance in partnership with Epidemiology Services
- Improve laboratory coordination of outbreak detection and management

Corporate Level Objectives and Performance Measures Related to Sub-Goal 1-A

2004 – 05 Objectives	Performance Measure
Improve detection of pathogens in outbreaks using better tests	% of gastrointestinal outbreaks which have etiology identified compared to previous years
Standardize introduction/ validation of new tests	% Project Approvals compared to all new tests
	Implementation of VIRAP in HA's
	Implementation of C. difficile laboratory surveillance program

Laboratory Services

Goal Two:

Detect and Respond to New Disease Threats

We work diligently to enhance laboratory networks. We will work together as a network to rapidly recognize and respond to emerging microbial and disease threats to human health threats including water and food borne bacterial, parasitic and viral disease outbreaks, pandemic influenza, bioterrorism, West Nile disease, Norovirus, nosocomial infections and other new emerging infectious disease agents.

Strategy

- Develop strategic laboratory alliances throughout the province and across Canada
- Educate laboratory professionals, public health workers and epidemiology colleagues about the laboratory science related to emergency disease threats

Corporate Level Objectives and Performance Measures Related to Goal 2

2004 – 05 Objectives	Performance Measure
Improve detection of new and emerging pathogens	Development and pilot of new C. difficile outbreak algorithm
Develop molecular detection and fingerprinting techniques for use in the BC lab network along with other surveillance and outbreak investigation tools	Evaluation of C & W/BCCDC respiratory testing services
	Implement PCR-based method for TB fingerprinting
	Pilot use of Cryptosporidium fingerprinting in GVRD water samples
	Development of molecular method for Cyclospora detection in food
Enhance response capability of the CL3 facilities and Biohazard Containment Program (BHC)	Achieve Health Canada re-accreditation
	Resource expanding BHC Program

Goal Three:

Develop and Apply Advanced Informatics

Implement a standardized laboratory information system (Misys) for improved patient and community health care.

Strategy

- Create BCCDC Team to be part of the PHSA LE IT Team
- Evaluate protocols that address laboratory information stewardship as well as patient privacy
- Collaborate with Epidemiology to improve reportability of laboratory confirmed communicable diseases
- Partner with the Ministry of Health on the Drinking Water Information Management Program

Corporate Level Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Further implementation of document management and performance tracking software (QSI)	80% of laboratory SOPs in QSI
Recruit additional LIS support including specialists in environmental health and in LIS QA (LIS) to keep up with increasing complexities and needs for Quality Management, Quality Assurance, surveillance and molecular testing	Provide advanced training in bioinformatics to data administrators Complete mapping of LIS data on reportable communicable diseases to iPHIS Develop indicators of Misys implementation progress with PHSA partners
Implement PHSA-wide LE LIS	BCCDC component of Misys Team on site with LE Team

Laboratory Services

Goal Four:

Create Knowledge Through Applied Research and Innovation

Discover, analyze and communicate on public health related scientific findings that contribute to evidence-based policy and practice for improved health for British Columbians.

Strategy

- Obtain external funding for public health related research projects
- Enhance partnerships within the Canadian Water Network and the Canadian Public Health Laboratory Network for education and research
- Create PHSA partnerships for enhancing pubic health research
- Work with Regional Health Authority partners on research and educational projects based on their needs and priorities

Corporate Level Objectives and Performance Measures Related to Goal 4

2004 – 05 Objectives	Performance Measure
Seek external funding for applied public health research projects	Secure external funding for at least one new project
Presentation of scientific findings at provincial, national and international conferences	Number of abstracts/posters presented
	Number of peer-reviewed publications
Collaborate with national and provincial partners to continue studies of enhanced surveillance for drinking water	Obtain grant funding for extension of this research collaboration

Goal Five:

Advance Public Health Excellence

Attract, develop and retain highly qualified persons to sustain and support state-of-the-art public health services throughout the province

Strategy

- Develop competitive human resources strategies to recruit and retain excellent laboratory leaders
- Enhance educational opportunities for public health workers

Corporate Level Objectives and Performance Measures Related to Goal 5

2004 – 05 Objectives	Performance Measure
Support professional development of laboratory staff through the Staff Development Team	Number of continuing education sessions for laboratory staff
	Develop proposal for support of advanced, post-graduate staff education
	Recruit excellent Medical Microbiologist leaders
	Development and consultation of our Distance Education modules
Provide public health staff education	Complete Quality Manual Volume I
Improve laboratory Quality Management System	Start work on Quality Manual Volume II

Laboratory Services

Goal Six:

Provide Leadership and Create Partnerships

Provide PHSA, provincial and national leadership and create alliances to facilitate the development of an effective laboratory system for British Columbia first and then for Canada.

Strategy

- Continue to provide leadership in the Canadian Public Health Laboratory Network (CPHLN)
- Continue to build PHSA laboratories LE (Laboratory Enterprise)

Corporate Level Objectives and Performance Measures Related to Goal 6

2004 – 05 Objectives	Performance Measure
Develop financial tools to manage revenue generating laboratory projects	Implementation of project tracking and budget management tools for the Roche project
Provide leadership in the Canadian Public Health Laboratory Network (CPHLN)	Meet twice, participate in 4 teleconferences, and partner on 2 projects
Participate in the PHSA Lab Enterprise project to rationalize microbiology testing and optimize cost-efficiencies in a patient-focused, community-centred framework	Create PHSA Microbiology Leadership Team
	Integrate Research and Development, Quality Management, Biosafety and Infection Control Services PHSA-wide
Explore research opportunities with Regional Health Authorities and PHSA LE partners	Hold meetings to discuss mutual interests re H. pylori, human papillomavirus (HPV), and other risk factors for cancer
Work with PHSA LE partners on new approaches for cost savings and revenue generation	Develop an LE strategic plan with cost pressures, core functions, academic leadership and excellent patient care in mind

STD/AIDS Control

Dr. Michael Rekart, *Director, STD/AIDS Control*

STD/AIDS Control Program directs, coordinates, supports and monitors province-wide efforts to reduce the spread of sexually transmitted diseases (STDs) and HIV and to minimize their adverse health effects in British Columbia.

Policies and procedures for prevention, management and control are developed and disseminated by STD/AIDS Control; and expert consultation is available to public health practitioners for the diagnoses and management of these diseases. A central registry and reporting system for reportable cases of STDs and AIDS is maintained, analyzed and monitored.

An STD/HIV clinic is operated by the Program to provide ambulatory, free and confidential assessment, treatment and education on STD's as well as counselling and referral for those who are HIV positive and for complicated STD cases. The clinic provides an excellent venue for ongoing clinical research and it is the major provincial training site in STDs and HIV testing and counselling for medical residents, interns and public health nurses.

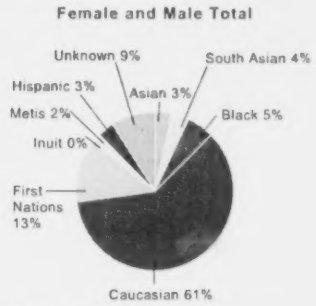
The STD/AIDS Prevention Street Nurse Program focuses on reducing the transmission of STDs and HIV amongst street-involved persons such as street youth, drug users and sex workers. The program provides STD/HIV education, testing, diagnosis and management, support and advocacy, crisis counselling, first aid and medical and social service referrals. The program also serves as the major provincial training site for STD/HIV outreach.

The Chee Mamuk Aboriginal Program provides on-site STD, HIV/AIDS and hepatitis education to Aboriginal communities on and off reserve. The program delivers high quality community-based workshops and professional development training for Aboriginal health and human service workers, and Band and Tribal councils in order to plan and deliver culturally sensitive and sound education sessions.

The STD/AIDS Education and Training Department provides training programs in STD diagnosis and treatment, HIV testing and counselling and STD outreach nursing.

STD/AIDS Control is supported by its Resource Centre which provides information on STD/HIV/AIDS to health care practitioners, schools, businesses and the public in a variety of media.

BC new HIV positive tests by ethnicity • 2003



STD/AIDS Control

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal A - Elimination

Eliminate syphilis by 2008 (<0.5/100,000)

Strategy

- Implement activities focused on identified high risk groups to case-find and treat; and to communicate progress frequently

Corporate Level Objectives and Performance Measures Related to Sub-Goal 1-A

2004 – 05 Objectives	Performance Measure
Incorporate social network analysis (SNA) as a regular case finding strategy	Priorities identified regularly and all new cases of syphilis tracked
	Social networks identified, database helps locate clients, nurses use databases
	Feasibility evaluated and results communicated locally, nationally and internationally
Use media campaign to increase awareness in MSM community	Increased syphilis and HIV awareness in MSM community as measured by annual survey

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal B – Control

By 2006, decrease new positive HIV tests by 30%

Strategy

- Maintain and develop strategies to prevent HIV spread in gay men, IDUs and Aboriginal populations

Corporate Level Objectives and Performance Measures Related to Goal 1-B

2004 – 05 Objectives	Performance Measure
Support and evaluate HIV reportability and contact tracing	Ongoing communication with reportability nurses from Health Authorities
	Program revised as needed
	Complete evaluation

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal B – Control

By 2005, develop a system to estimate annual Chlamydia prevalence; and by 2006, reduce Chlamydia incidence;

Strategy

- Develop a system to collect key indicators of Chlamydia prevalence and incidence Identify and deliver Chlamydia prevention strategies

Corporate Level Objectives and Performance Measures Related to Goal 1-C

2004 – 05 Objectives	Performance Measure
Regularize system of monitoring private lab Chlamydia results	Receiving data on 90% of all positive Chlamydia tests in BC
Complete population-based study to estimate Chalmydia prevalence	Survey results provide a reliable estimate of Chlamydia prevalence and incidence

STD/AIDS Control

Goal Two:

Detect and Respond to New Disease Threats

Anticipate, detect and respond to new threats from STIs and HIV

Strategy

- Conduct survey to determine acceptability of self-sampling for HPV & Pap smear in street involved women in Vancouver
- Prepare for HPV vaccine
- Develop strategy to introduce HPV co-testing with Pap smear

Corporate Level Objectives and Performance Measures Related to Goal 2

2004 – 05 Objectives	Performance Measure
Conduct survey to determine acceptability of self-sampling for HPV & Pap smear in street involved women in Vancouver	Complete study of 100 women
Prepare for HPV vaccine	Participate in provincial HPV vaccine committee
Develop strategy to introduce HPV co-testing with Pap smear	Conduct pilot testing in STD clinic on 100 patients; participate in provincial implementation team

Goal Three:

Develop and Apply Advanced Informatics

Improve capacity to collect, analyze, communicate and distribute STI/HIV data and information

Strategy

- Complete "Soul Access" cubes and provide training to Health Authorities so they can access real-time STI/HIV/AIDS data; improve surveillance

Corporate Level Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Install Soul Access cubes on BCCDC intranet	"Soul Access" successfully piloted
Get Integrated Surveillance Database (ISDB) up and running	ISDB in regular usage replacing HIVSS database
Identify new electronic system for STD	Recommendations for new system submitted to IM/IT

Goal Four:

Create Knowledge Through Applied Research and Innovation

Strategy

- Conduct significant research activities that result in evidence-based strategies to control STIs

Corporate Level Objectives and Performance Measures Related to Goal 4

2004 – 05 Objectives	Performance Measure
Foster divisional interest in research	Research Plan completed
Complete STD research studies	3 peer reviewed articles per year
Collaborate with HAs on research to improve public health programs	Develop and complete collaborative research studies

Goal Goal Five: :

Advance Public Health Excellence

Maintain and improve the quality of services and programs

Strategy

- Effectively respond to internal and external education and training needs

Corporate Level Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Develop nursing competency framework	Competency framework approved by RNABC
Revise divisional training materials to reflect Scope of Practice legislation	Competency based training program finalized and approved by RNABC, PHSA and MOH
Provide learning opportunities for staff	> 5 support staff trained annually
	> 30 nursing staff trained annually

STD/AIDS Control

Goal Six:

Provide Leadership and Create Partnerships

Provide leadership in STD control and foster collaborative partnershipd

Strategy

- Increase Chee Mamuk services
- Enhance national and international programs and capacity

Corporate Level Objectives and Performance Measures Related to Goal 4

2004 – 05 Objectives	Performance Measure
Increase CD control and prevention services to Aboriginals	New AIDS Policy in 2 Aboriginal groups
Increase capacity in Vietnam for STDI/HIV/ AIDS control	AIDS School Curriculum adopted by 2 schools
	Establish 3 successful STD clinics in 3 different Vietnam provinces

Tuberculosis Control

Dr. Kevin Elwood, *Director*

Tuberculosis (TB) Control serves as British Columbia's centralized referral centre for the prevention, management and control of tuberculosis and maintains and monitors a registry of all active cases of TB in the province. The program's operations aim to ensure a progressive reduction in the annual incidence rate of active tuberculosis and its morbidity and mortality.

Policies and procedures for prevention, treatment and control of tuberculosis are recommended by TB Control. Expert consultation is available to public health and community practitioners for the diagnoses and management of tuberculosis.

Clinic services are provided to the public through outpatient clinics in Vancouver, New Westminster and Victoria; a Street Nurse Program provides supervised treatment for tuberculosis in the downtown east side of Vancouver and Field Operations provides consultative clinics in various locations of the province to serve those clients outside of the lower mainland. Tuberculin skin testing, contact tracing, on site chest X-ray, arrangement of hospital admission for treatment, directly observed treatment and follow-up of active cases, and recent immigrants referred for post landing surveillance are some of the services provided through the centre.

TB Control contracts with the federal government to provide services to Aboriginals living on reserve and contracts with the government of Yukon to provide services to that region.

Tuberculosis Rates by Year, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
BC Tuberculosis Cases	332.0	312.0	323.0	413.0	337.0	332.0	290.0	391.0	303.0	319.0
BC Tuberculosis Rate	9.0	8.2	8.3	10.4	8.4	8.3	7.1	9.5	7.3	7.6
Canadian Tuberculosis Rate	7.1	6.6	6.3	6.6	5.9	5.9	5.5	5.5	5.2	

Tuberculosis Control

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal A – Elimination

Sub-Goal B – Control

Sub-Goal C – Environment

Achieve effective control for tuberculosis, HIV, hepatitis A, hepatitis C, gonorrhea, chlamydia, pertussis and influenza

Strategy

- Initiate treatment for every case of active disease within 48 hours from the date of diagnosis
- Provide fully supervised therapy for those at risk for poor adherence to treatment
- Offer preventive treatment to 100% of high risk foreign born cases which are referred for post-landing surveillance
- Reinforce recommendations for preventative treatment of all appropriate cases
- Initiate contact tracing of every case of active disease within two weeks
- Provide for staff safety by ensuring appropriate negative pressure airflow in clinics; staff take full safety precautions against exposure and screening of medical and support staff as recommended.

Corporate Level Objectives and Performance Measures Related to Goal 1

2004 – 05 Objectives	Performance Measure
Promptly initiate treatment of every case of active disease such that treatment is initiated within 24 hours from date of diagnosis	Time between diagnosis and treatment commencement
95% treatment completion rate of every case of infectious TB	Completion rate
Offer preventative treatment to all high risk patients with latent tuberculous infection	# offered, # accepted, % completion chart audit
Review all cases referred for post landing surveillance for TB risk assessment	% reviewed by TB Control vs # referred
Timely and effective contact tracing of every case of active disease in order to screen 95% of close household contacts and 80% of non household contacts	% of household contacts screened % of non household contacts screened
Minimize risk of TB infection in TBC clinics in order to achieve a zero rate of staff infections	% infection in staff

Goal Two:

Detect and Respond to New Disease Threats

Develop institutional mechanisms to rapidly recognize the response to an emerging infectious disease threats to health

Sub Goal Rapidly recognize and respond to drug resistant tuberculosis as an emerging infectious disease threat to health

Strategy

- Review every case of multiple drug resistant (MDR) disease
- Monitor and assess every case of acquired drug resistance for causation
- Promptly screen all migrants upon arrival to BC
- Encourage timely notification from Citizen and Immigration Canada of HIV infected persons entering BC
- Replace BCG vaccination with enhanced surveillance of children of high risk reserves
- Implement evidence based guidelines for treatment of HIV related TB for those with low CD4 counts
- Initiate early screening of all non convention refugees and migrants in lower mainland
- Implement screening of all refugees in the Division of TB Control.

Corporate Level Objectives and Performance Measures Related to Goal 2

2004 – 05 Objectives	Performance Measure
Ensure every case of multiple drug resistance (MDR) disease has appropriate drug treatment and isolation	% of MDR cases completing treatment
Causation for every case of acquired MDR will be determined	% of causal determination
Monitor rates of miliary and CNS TB in aboriginal children on reserve	# of cases reported
Calculate Annual risk of infection (ARI)	ARI in aboriginal children
Finalize agreement with Citizen & Immigration Canada (CIC) to refer all refugees to BCCDC for medical screening	Date of implementation
Ensure that CIC informs BCCDC of HIV positive immigrants	# of notifications received

Tuberculosis Control

Goal Three:

Develop and Apply Advanced Informatics

Develop advanced distributive information system for surveillance alert for performance monitoring purpose and health

Advanced informatics will be developed for surveillance, alert and performance monitoring purposes of Tuberculosis Control

Strategy

- Modify TB Module of PHIS to serve the business process in TB Control
- Assessing and review the optimal information requirements for effective control of tuberculosis and apply the appropriate resources to deliver
- Assessing advanced medical technology
- Explore the integration of TB Control with PHSA initiated PAC System implementation.

Corporate Level Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Implement version 6.5 to improve TB clinical module	Date of implementation
Implement version 6.51 to allow access to TB Module by Health Authorities	Date of implementation
Install high quality viewing station to allow improved visualization of digital x-ray images provided from sites around the province	Date of installation

Goal Four:

Create Knowledge Through Applied Research and Innovation

Establish an environment which fosters discovery of research findings of international significance and which contributes to evidence based policy development

Applied research and innovation will be fostered which will contribute to evidence based policy development concerning tuberculosis control and elimination

Strategy

- Participate in CDC Clinical Trials Consortium
- Participate in CDC TB Epidemiology STUDIES Consortium
- Partnership with CDC-Atlanta focused on enhanced contact investigation through social networking
- Submit papers for peer review publication

Corporate Level Objectives and Performance Measures Related to Goal 4

2004 – 05 Objectives	Performance Measure
Continue participation in CDC Cinical Trials to assess the value of moxifloxacin in lessening time to sputum conversion, and alternatives to treatment of TB	# of patients recruited
Complete assessment of the value of using social networking in contact tracing; assessment of the value of using social netowrking in contact tracing; assessment of missed apportunities in TB services for foreign-born; risks of latent TB treatment; immunogenetics of TB	Date of completion
Initiate study to explore genetic predispositions to hepatotoxicity	Date of initiation # of subjects studied
Submit 3 peer reviewed articles for publication	# of publications
Submit 2 abstracts for presentation	# of abstracts accepted
Explore value of serological tests for diagnosis of latent TB infection	# of patients studied
Study diagnostic delay in active TB cases	Completion date of study
Explore the value of skin testing in "low risk" reactors	Completion of study

Tuberculosis Control

Goal Five:

Advance Public Health Excellence

Promote and develop the skills of highly qualified persons to sustain and support state of the art public health services throughout the province.

Public Health excellence in control of tuberculosis will be maintained by promoting and developing the skills of highly qualified persons.

Strategy

- Continue training programs leading to certification for tuberculin skin testing.
- Expand training program to improve quality of skin testing and interpretation.
- Update the TB section of the CDC Manual to ensure contents reflect current guidelines.
- Complete development of video explaining latent TB infection to aboriginal community.

Corporate Level Objectives and Performance Measures Related to Goal 5

2004 – 05 Objectives	Performance Measure
Tuberculin skin testing is performed consistently and accurately read throughout the province	# of health care professionals completing the course
Public health practitioners will have timely access to clear policy and procedure for effective and efficient control of TB	% increase of web site visits to on-line policy manual Date of completion of manual update
Expertise of TBC practitioners- will be used to educate and train other health practitioners involved in control and management of TB	% increase in number of persons attending sessions Satisfaction rates
Implement iPHIS TB module for all Health Authorities (HAs)	Date of implementation Quality of HA entered data

Goal Six:

Provide Leadership and Create Partnerships

Promote and develop the skills of highly qualified persons to sustain and support state of the art public health services throughout the province

Provide leadership and create alliances in order to facilitate the development of an integrated public health system for British Columbia

Strategy

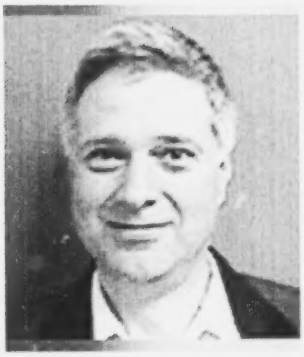
- Create and maintain partnerships with other agencies to reduce the rates of active TB especially in high-risk areas
- Continue close liaison and participation with local, national and international committees and agencies

Corporate Level Objectives and Performance Measures Related to Goal 6

2004 – 05 Objectives	Performance Measure
Continue collaboration with Vancouver Coastal Health Authority to reduce rates of TB in downtown Eastside	Degree of mutual satisfaction with partnership initiatives
	Reduction in active TB disease in downtown eastside
	% Screened
	% increase in those placed on treatment for latent infection
Close liaison and participation in National Committees related to TB control	# of committees attendances
	# of presentations at conferences, national, and international events
	# of partnerships which lead to demonstrable improvement in TB control

Environmental Health Services

Environmental Health Services



Dr. Ray Copes,
Director, Environmental Health – Toxicology

Environmental Health Services at BCCDC:

- Provide the Ministry of Health, and Ministers with scientific advice the Ministry requires, to develop provincial policy and legislation. As well, provide scientific and technical information, which will assist Ministers in responding to issues and answering questions related to environmental health
- Provide capability to support Health Authorities with up-to-date information on responding to or managing unusual or complex situations involving risks to human health from environmental hazards
- Develop province-wide information systems on the presence of, and human exposure to, hazardous agents in British Columbia
- Provide accurate up-to-date information on relationships between environmental hazards and human health for the public, health care providers and policy makers
- Increase the availability of advanced training opportunities for students and staff already working in Environmental Health in British Columbia
- Provide improved access to a broad range of policy relevant scientific information for effective policy setting and program management with an emphasis on setting priorities and focusing on environmental hazards contributing the greatest burden of morbidity and mortality in the British Columbia Population
- Contribute to the expansion of research capacity in environmental health in British Columbia
- Enhanced cost efficiencies through a central pool of expertise and coordinated funding agreements

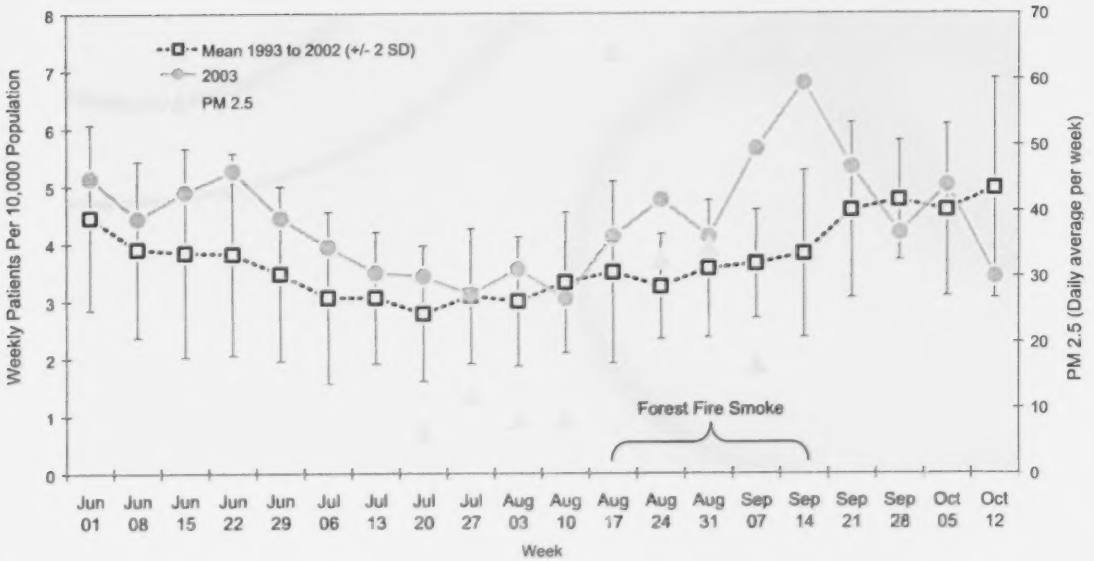
Environmental Health Services at BCCDC includes the following programs:

- Food Protection Services
- Radiation Protection Services
- Drug and Poison Information Centre

In addition to the program areas, Environmental Health Services provides specialized consultation and advice on a broad range of topics related to the recognition, assessment and control of environmental hazards of importance to human health. As well, Laboratory Services, plays an important role in the detection and control of environmental pathogens, especially in relation to food and drinking water.

Environmental Health Services

Respiratory Disease, MSP Patients, LHA 23 – Central Okanagan, B.C.,
Weeks of June 1 to October 12, 1993-2003



Source: Dr. R Fisk, W. VanderKuyl, Population Health aand Wellness, BC Ministry of Health Services.

Environmental Health – Toxicology

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal C – Environment

Provide expertise in the recognition, assessment and control of environmental hazards that have an impact on the health of British Columbians.

Strategy

- Provide expert "state-of-the-art" scientific consultation in Environmental Health and Toxicology in support of the Ministries of Health Planning and Health Services, Health Authorities, and other stakeholders such as WCB, and other government Ministries, municipalities, individuals and community groups
- Provide leadership for the establishment of a cost effective environmental health function at BCCDC
- Develop and maintain academic and research affiliations to harness knowledge and develop BC scientists, researchers, and practitioners
- Develop revenue opportunities to support the advancement of environmental health expertise at BCCDC

Corporate Level Objectives and Performance Measures Relatedto Sub-Goal 1-C

2004 – 05 Objectives	Performance Measure
Develop a proposal for an expanded environmental health function at BCCDC	Approved Business Plan
Provide environmental health and toxicology expert advice on a 24/7 basis to Health Authorities and Ministry stakeholders	Stakeholder/customer survey

Environmental Health – Toxicology

Goal Two:

Detect and Respond to New Disease Threats

Develop institutional mechanisms to rapidly recognizing the response to an emerging infectious disease threat to health

Strategy

- Monitor national and international environmental health developments, assess their relevance to BC and develop related risk management strategies
- Provide direct consultation to public health field staff in support of environmental health investigations and hazard abatement planning
- Develop a data base for environmental health surveillance and analysis of the cost effectiveness of environmental health strategies

Corporate Level Objectives and Performance Measures Related to Goal 2

2004 – 05 Objectives	Performance Measure
Provide expert consultation to Health Authorities and Ministry of Health Services staff on health risks from serious environmental hazards within 24 hours of request	Client feedback
Monitor medical/scientific literature and electronic data for information of relevance to environmental toxicity and hazards in British Columbia	Relevant information abstracted and disseminated

Goal Three:

Develop and Apply Advanced Informatics

Develop institutional mechanisms to rapidly recognizing the response to an emerging infectious disease threat to health.

Strategy

- Collaborate with other jurisdictions to obtain access to environmental health information sources
- Build upon new initiatives such as Drinking Water to develop an environmental health information system
- Work with PHSA partners, such as BC Cancer, Children's and Women's Hospital and the Population Health Division to develop information management capacity

Corporate Level Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Provide expertise and input to Ministry of Health to develop databases in air, water, food and other environmental media of relevance to protecting public health	Provision of requested input on drinking water database. Identify other databases needed
Work with academic institutions on research projects using new techniques to relate environmental data to human exposures and health risks.	Successful collaboration with Universities of British Columbia and Victoria to link neighbourhood gradients in air pollution to health risks.

Goal Four:

Create Knowledge Through Applied Research and Innovation

Establish an environment which fosters discovery of research findings of international significance and which contributes to evidence based policy development.

Strategy

- Strengthen post secondary research affiliations
- Engage Health Authorities in research partnerships
- Partner with WCB and other Ministries to fund and undertake environmental health research
- Maintain UBC teaching responsibilities and engage graduate students
- Contribute to peer reviewed publications
- Participate in National and International Educational and Policy Forums

Corporate Level Objectives and Performance Measures Related to Goal 4

2004 – 05 Objectives	Performance Measure
Principal investigator or co-investigator on 3 externally funded research initiatives	External funding received.
One peer reviewed publication.	Publication accepted.
Participate in on-campus teaching and field supervision of graduate students and physicians taking specialty training	Contribution to on camps courses, Resident supervision and graduate student training

Environmental Health – Toxicology

Goal Five:

Advance Public Health Excellence

Build a world class environmental health capability within the Public Health system in British Columbia.

Strategy

- Support Health Authorities and other public agencies in the development of Environmental Health, Toxicology, Risk Assessment and Risk Management expertise
- Provide on priority environmental health issues
- Team build across the environmental health program areas at BCCDC and PHSA
- Use available resources to recruit additional staff to complement existing expertise

Corporate Level Objectives and Performance Measures Related to Goal 5

2004 – 05 Objectives	Performance Measure
Provide two training sessions for Health Authorities and other public agencies in Environmental Health, Risk Assessment and Toxicology.	Delivery of courses, evaluation from participants
Use available resources to recruit additional staff	Available resources utilized for staff recruitment

Goal Six:

Provide Leadership and Support Partnerships

Provide leadership in the translation of scientific knowledge about the effects environmental hazards on human health into effective measures to reduce these risks.

Strategy

- Work in collaboration with the Core Public Health Review and related legislation to establish the environmental health function as a key component of public health
- Support the Ministry, Health Authorities and the PHO in addressing critical environmental health issues
- Develop partnerships within PHSA to strengthen capacity and commitment to environmental health disease prevention strategies
- Develop and maintain national and international collaborations to ensure BC has ready access to the best science and knowledge

Corporate Level Objectives and Performance Measures Related to Goal 6

2004 – 05 Objectives	Performance Measure
Develop the concept of an Environmental Health Advisory Committee to provide a mechanism for input to the direction and goal setting of an Environmental Health Centre at BCCDC.	Concept documented and endorsed by key stakeholders
Review of evidence for core programs in environmental health and in partnership with Ministry and regional HAs, define the content of effective core programs in environmental health.	Environmental Health included in core functions and legislation, effective evidence based programs implemented by HAs.

Food Protection Services

Food Protection Services identifies and coordinates research into emerging and known food safety risks. Partnerships continue to be developed with federal and provincial food safety agencies, academia, and funding agencies to enhance the province's research capabilities.

Larry Copeland,
Director, Food Protection Services

The safety of the food supply is a fundamental determinant of the health of British Columbians. Food Protection Services provides leadership in developing strategies and programs which contribute to ensuring the safety of the food supply in British Columbia. To this end, Food Protection Services provides direct prevention/inspection services to various food processing industries, and acts in a consultative/resource capacity to the Ministry of Health and the five Health Authorities directly responsible for the delivery of the remaining food safety programs. in these capacities Food Protection Services can directly control some factors affecting food safety, influence outcomes in others, and in some cases only respond to issues.

Food Protection Services delivers food safety programs to the dairy, meat and fish processing plants. While direct inspectional services are provided by Food Protection Services staff in dairy and fish processing plants, inspection services in provincially licenced abattoirs are provided by way of a contract with the Canadian Food Inspection Agency.

The recent trend toward outcome/science-based regulation and risk-based inspection requires that the Health Authorities implement strategies that enable field inspectors to carry out the prescribed objectives. Food Protection Services provides necessary support and guidance on policy and standards, training and education, and the science/technology of food safety.

Food Protection Services identifies and coordinates research into emerging and known food safety risks. Partnerships continue to be developed with federal and provincial food safety agencies, academia, and funding agencies to enhance the province's research capabilities.

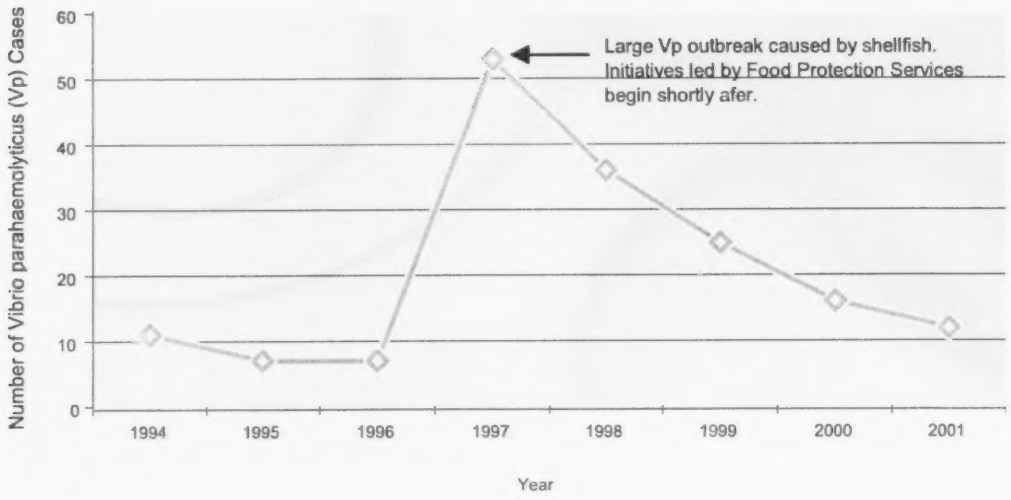
A significant proportion of foodborne illness occurs as a result of improper food handling practices by those who prepare food, either in food establishments or in the home. Food Protection Services leads the FOODSAFE program, (which educates individuals working in food establishments) and participates in the national public education campaign FightBAC!

Food Protection Services acts as the primary contact for emergency food recalls in British Columbia. This involves the dissemination of recall information to key provincial health agencies along with required actions and follow-up communiqués as necessary. In this way contaminated food products are efficiently removed from the public domain.

Food Protection Services organizes and leads food safety assessments of food industry sectors. These assessments involve coordinating the efforts of multiple levels of government and industry sectors, analyzing food safety systems, and making recommendations to change, add and enhance food protection strategies throughout the food continuum. Successful initiatives have been undertaken for the shellfish, shell egg and fresh produce industries.

Food Protection Services

Food Protection Services Attempts to Reduce Vibrio parahaemolyticus (Vp) Cases Through Partnerships with the Shellfish Industry



Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal A – Elimination

Sub-Goal B – Control

Sub-Goal C – Environment

Through the application of evidence based public health policies, reduce the impact of food safety hazards on human health.

- Ensure the public has access to reliable information that will assist them in making informed food safety decisions
- Develop strategies based on scientific principles that will assist Health Authorities in implementing strategies that will minimize the risk of foodborne illness
- Ensure that legislation, policies and standards are actively reviewed, and reflect current technology, practices and scientific knowledge
- Ensure BC's food safety programs are equivalent to national food safety standards established under the Canadian Food Inspection System

Strategy

- Develop public information materials on safe food handling practices
- Ensure food safety programs target the major causes/sources of foodborne illness
- Recommend to the Ministry of Health Services required changes to legislation, policies and standards
- Develop and maintain British Columbia Food Codes
- Evaluate applications and issue licences to provincial dairy, meat and fish plants as per statutory requirements
- Inspect dairy, meat and fish plants to ensure compliance with regulation requirements
- Ensure abatement of all critical hazards
- Take legal action where necessary including detention of products, issuance of tickets, closures and revocation of licences, and laying charges
- Submit and analyze samples for compliance with standards
- Develop and deliver educational courses, conferences and printed food safety materials
- Develop codes of good practices, HACCP, and GMP practices manuals
- Act as a resource for the industry about food safety/science, safe plant operation and equipment
- Maintain databases to provide statistical information on plant inspections, violation rates and critical hazards

Food Protection Services

Corporate Level Objectives and Performance Measures Related to Sub-Goal 1

2004 – 05 Objectives	Performance Measure
Develop public information materials on food safety	# of information materials developed
Conduct risk assessments, and develop strategies to minimize risk of foodborne illness	# of risk assessments, and strategies developed
Review legislation, policies and standards to ensure currency	#'s of legislation, policies and standards reviewed and updated
Ensure equivalency of food standards to national models	Participation in development of national models, and incorporation into BC's standards
Licence and inspect all provincial dairy, fish and meat processing plants	Process applications within 14 days. Dairy – 1 in-depth dairy inspection, plus average 3 other inspections per year. Meat – as per federal/provincial agreement. Fish – average of 3 inspections per year
Ensure correction of all critical hazard violations	Immediate correction, or within time specified

Corporate Level Objectives and Performance Measures Related to Sub-Goal 1

2004 – 05 Objectives	Performance Measure
Investigate reports of unsafe practice/ contaminated products	Investigations initiated within 24 hours of complaint
Sample and analyze dairy products for compliance with food safety standards	# of samples tested and analyzed for compliance with food safety standards.
Develop and deliver education programs/ materials aimed at empowering the processing industries to conduct self-inspection/safety programs	# of programs/materials developed
Maintain statistical information on the safety status of processing plants in BC	Maintenance of data bases for mandated food processing industries
	Analyses of data, and implementation of strategies based on analysis

Goal Two:

Detect and Respond to New Disease Threats

Position Food Protection Services to control, influence and respond to changes in the food safety system.

Strategy:

- Develop and maintain foodborne illness data which identifies critical factors such as the number of outbreaks, causes, foods of concern, and costs to the healthcare system
- Develop and recommend innovative ways to achieve reductions in the incidence of foodborne illness
- Initiate and participate on provincial/federal food safety management committees
- Promote food safety as an essential component of the healthcare system
- Establish working relationships with key federal food safety departments, and request/participate in food safety research initiatives
- Act as the primary provincial contact for food emergencies such as recalls and terrorism events. Disseminate information to Health Authorities, coordinate response, and liaise with federal food safety authorities
- Develop the province's legislation, policies and standards that will ensure currency of the province's food safety system
- Draft responses to Minister's letters
- Assist Health Authorities in responding to food safety issues from their Boards, and the public

Corporate Level Objectives and Performance Measures Related to Goal 2

2004 – 05 Objectives	Performance Measure
Develop data on the causes/incidence/cost of foodborne illness	Data base of food borne illnesses
Develop innovative approaches to achieve reductions in food borne illness	# of new food safety programs/strategies
Initiate/participate in provincial/federal food safety management committees	# of committees participating on
Act as primary provincial contact for food emergencies, recalls	# of food emergency events
Review and develop province's food safety legislation, policy and standards	# of legislation, policies and standards reviewed and developed
Draft Executive correspondence such as Minister's letters and briefing notes	# of Minister's letters and briefing notes

Food Protection Services

Goal Three:

Develop and Apply Advanced Informatics

Provide appropriate and timely support to the Ministry of Health Services and Health Authorities on food safety information and monitoring systems.

Strategies:

- Develop food protection website and maintain with current food safety information
- Develop innovative food safety assessment systems.
- Review data to assess trends, and develop intervention strategies
- Participate in provincial and national initiatives to enhance food safety data/reporting systems

Corporate Level Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Assist in, and maintain Food Protection Services' web site	Development of web site
Develop food safety assessment systems	# of systems modified/developed
Participate in provincial and national data/reporting system initiatives	# of provincial and national initiatives
Advise Health Authorities on new/innovative information and monitoring systems	Communication with Health Authorities regarding information and monitoring systems

Goal Four:

Create Knowledge Through Applied Research and Innovation

Establish an environment which encourages research projects, and which contributes to evidence based policy development.

Strategies:

- develop research collaborations with stakeholders, and obtain external funding in applied food safety research
- develop partnerships and collaborations internally and externally to identify priorities and seek funding sources

Corporate Level Objectives and Performance Measures Related to Goal 4

2004 – 05 Objectives	Performance Measure
Identify at least 2 key food safety research needs per year	# of food safety research needs identified/year
Undertake or facilitate at least 1 research initiative/year	# research initiatives/year
Establish at least one new link with the research community	# of links established/year

Goal Five:

Advance Public Health Excellence

Promote and develop the skills of highly qualified persons to sustain and support progressive food safety services throughout the province.

Strategies:

- Develop and provide food safety training courses to health authority staff
- Develop/provide current food safety information materials to Health Authorities
- Conduct literature searches; obtain scientific information on issues of concern to Health Authority staff
- Develop/maintain a listing of food protection information sources (e.g. journals, books, websites)
- Maintain expertise as a scientific food safety resource for the Health Authorities, other government agencies, the food industry and the public

Corporate Level Objectives and Performance Measures Related to Goal 5

2004 – 05 Objectives	Performance Measure
Develop/provide food safety training courses to Health Authority staff	# of training courses delivered Course/event evaluations
Develop food safety information materials for Health Authorities	# of materials developed
Conduct literature searches, obtain scientific information for Health Authorities	# of searches, scientific information provided
Develop information sources	# of sources developed
Staff attendance at seminars, conferences on food safety	# of courses/conferences attended

Food Protection Services

Goal Six:

Provide Leadership and Create Partnerships

Provide leadership and create strategies to facilitate development of an integrated food safety system for British Columbia.

Strategies:

- Represent the province in the development of the Canadian Food Inspection System
- Represent the province on federal/provincial/territorial food safety advisory/policy committees
- Facilitate the formation of provincial food safety advisory committee/councils, and bring together stakeholder groups to discuss and make recommendations concerning food safety issues
- Develop and maintain communication links with Health Authorities and external stakeholders to ensure currency of legislation, policy and standards
- Establish communication links with universities, technical schools, senior government departments and food specialists
- Represent the province to ensure the continued management and delivery of the FOODSAFE program

Corporate Level Objectives and Performance Measures Related to Goal 6

2004 – 05 Objectives	Performance Measure
Represent the Province on federal/provincial/territorial committee to develop a Blueprint for the Canadian Food Inspection System	Participation on FPT committee(s)
Develop/Chair provincial food safety committees/ councils	# of committees formed/chaired
Develop communication links with Health Authorities and other external stakeholders to ensure currency of legislation, policy and standards	# of linkages
Establish communication links with scientific and technical resources	# of linkages
Ensure the currency/ viability of FOODSAFE program, and act as a resource for Health Authorities	Continued recognition and support of FOODSAFE program

Radiation Protection Services

Brian Phillips,
Director, Radiation Services

As one of three programs to be transferred to BCCDC, effective April 1, 2002, the role of the Radiation Protection Services (RPS) is to provide programs and services to help protect British Columbians from radiation hazards. Through protection, prevention and health promotion initiatives, RPS strives to help control and reduce the risks of radiation-induced diseases and injuries. Its operates four programs to address the key areas where radiation hazards risks are found.

The Medical X-ray Program works closely with the health professions that perform diagnostic radiology procedures to ensure patients, staff and the public are safeguarded. Emphasis is placed on ensuring patient exposures are controlled while obtaining the necessary diagnostic information. New computer controlled X-ray systems and the introduction of digital imaging technology presents new challenges for ensuring that unnecessary increases in exposure do not occur.

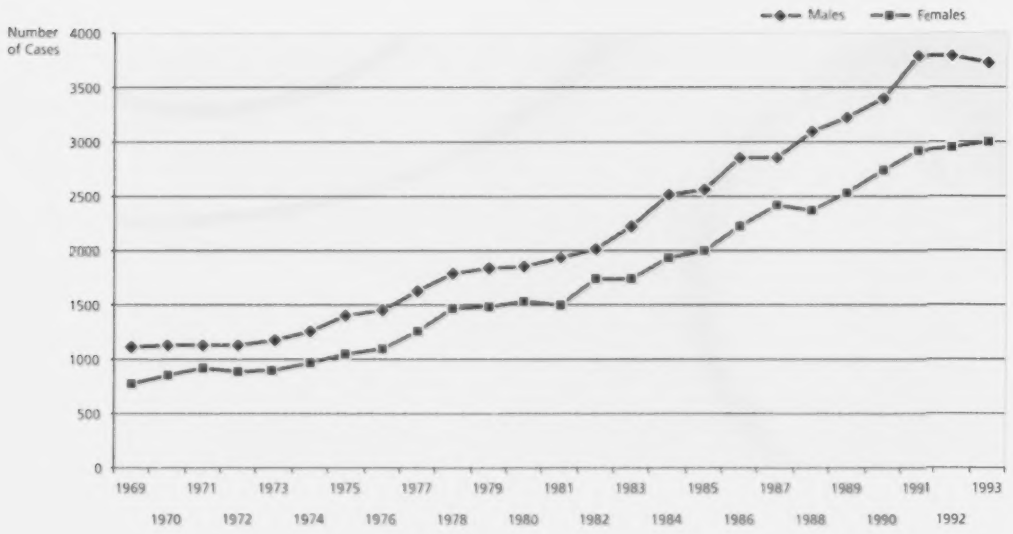
The Environmental Radiation and Laboratory Measurements Program focuses on naturally occurring radioactive materials and special radiation facilities located around the province. Concerns include radon gas in homes, schools and other buildings; radioactivity in well water and other supplies; and enhanced radioactivity arising through some industrial processes. The program conducts environmental monitoring at several sites in BC, including the naval bases where foreign nuclear powered vessels make visits. Analyses for radioactivity content are made on food, water and selected samples. The laboratory is CAEAL accredited.

The non-ionizing radiation and non-medical X-ray program addresses concerns involving ultraviolet radiation; lasers, electromagnetic fields from telecommunication, industrial equipment and electrical distribution systems. A major initiative is supporting the implementation of a provincial sun awareness and skin cancer prevention strategy, to help reduce the increasing incidence of skin cancer in BC (see attached chart on skin cancer incidence). This program works closely with the Workers Compensation Board of BC concerning workplace hazards from industrial x-ray units and non-ionizing devices. A number of projects have been completed in conjunction with Health Canada.

The fourth program deals with nuclear emergency preparedness and radiation incident/spill response. RPS is on call to assist emergency first line responders to deal with events such as transportation accidents involving vehicles carry radioactive sources. The division also prepares plans and trains first responders to handle "dirty bomb" incidents It works closely with the BC Provincial Emergency Program to maintain nuclear emergency response arrangements for any events which could impact British Columbia.

Radiation Protection Services

Non-Melanoma Skin Cancer Cases Diagnosed in BC



*Data courtesy of the BC Cancer Agency

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal A – Elimination

Through the application of evidence based public health policies, reduce the adverse impact of environmental hazards on human health

Control and limit exposure from diagnostic radiology procedures, from naturally occurring radioactive materials and nuclear facilities; from x-ray devices used in workplaces, research and education that fall under provincial jurisdiction

Strategy

- Establish and deliver effective protection, prevention and promotion programs for the medical, dental, chiropractic and veterinary diagnostic x-ray fields
- Extend the capability of the environmental monitoring program for routine services and emergency response needs
- Assist in identification and management of NORM exposures and waste materials
- Support the development and implementation of non-medical x-ray safety and health initiatives in industrial, research and teaching settings, in cooperation with the Workers Compensation Board, other agencies and responsible users

Corporate Level Objectives and Performance Measures Related to Goal 1 A

2004 – 05 Objectives	Performance Measure
Health Professions participation in the medical x-ray Partnership Program	Signed agreements with 5 Colleges, QMPs developed and surveys started. Ongoing development of the colleges envolvement.
Identify new priorities and initiate revised procedures for routine and emergency laboratory measurements and environmental monitoring	New activities and sites identified; monitoring Procedures established and testing activated: CAEAL accreditation.
All NORM issues are successfully addressed through exposure control and waste management processes Scope out the requirements for investigating NORM in BC drinking water supplies	Development of technical guidelines for industrial workers # of issues successfully addressed
Protocols will be developed and accepted by the responsible agency to address non-medical x-ray hazards in workplaces and education facilities	Study scope prepared Sites for preliminary sampling identified Protocols accepted within 6 months of development. On-going technical support and advice provided

Radiation Protection Services

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal B – Control

Prevent damage to eyes, skin and other organs and tissues that can result from excessive exposures to high power laser and other optical radiation and to electromagnetic fields emitted from electrically energized devices

Strategy

- Support the development and delivery of environmental health programs with regional health authorities concerning personal services facilities, such as tanning salons and laser skin treatments by:
- Ensuring protection is provided for all persons at high power (Class 3b and 4) laser facilities
- Providing environmental health officers and other inspectors with sufficient technical resources and advice to assist in their inspections to ensure applicable standards for operating, specified in the personal services regulations are met
- Ensure that high power radio and other transmitting systems do not expose the public and workers in excess of standards
- Conduct field measurements; provide timely and current information on the hazards of and the protection from various non-ionizing radiation sources

Corporate Level Objectives and Performance Measures Related to Sub-Goal 1 B

2004 – 05 Objectives	Performance Measure
Facilitate training for EHO's through development of laser safety guides and training, based on RPS hazard assessments from various laser applications. Development of an inspection program for laser hair removal facilities.	# of inspectors trained, training courses arranged, and safety guides developed for regulatory agencies
Health Authorities supported to ensure tanning salon facilities conform to legislation and guidelines	Materials for Health Authorities (HAs) updated annually and distributed within one week of request New material supplied when developed improvement in tanning facility compliance rates
Existing and new radio systems or other high power RF devices assessed for conformity with applicable standards and corrective action taken if needed	# of systems assessed # of advisory documents produced Successful remediation rate, where required
Radiation Issue Notes are developed and distributed within two weeks of a non-ionizing radiation issue being assessed RIN Information posted to RPS web site within 4 weeks	% of RIN issues communicated within time targets

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal C – Environment

Reduce skin cancer incidence and mortality associated with exposure to the sun's ultraviolet radiation and other UV sources

Strategy

- Promote the implementation of the provincial Sun Awareness and Skin Cancer Prevention Strategy, by coordinating and facilitating external programs and initiatives through a Provincial Action Committee
- Re-establish a data reporting process on skin cancer incidence and mortality, to identify current disease trends for British Columbia
- Ensure up to date information is made available for health authority staff who are actively involved in organizing annual sun awareness events
- Liaise with federal and other health and environment agencies regarding their programs and initiatives, to take advantage of their resources and to ensure there is avoidance of overlap and duplication of activities

Corporate Level Objectives and Performance Measures Related to Sub Goal 1 C

2004 – 05 Objectives	Performance Measure
Slow the growth rate of skin cancer incidence in order to achieve a zero growth rate by year 2006	Year over year incidence rate of new skin cancers
	# of 'settings' activities involved in
Support Provincial activities that are based on fulfilling the 'settings' identified in the Provincial Sun Awareness and Skin Cancer Prevention Strategy	Strategy follow-through rate in demonstration settings
Through arrangements with BC Cancer Agency obtain timely and comprehensive epidemiological information about skin cancer incidence and mortality	Skin cancer incidence and mortality rate data collected and published by BC Cancer Agency
	# of events in each health authority
Assist health authorities to carry our local/regional sun awareness events. Provide resource information to public health nursing programs for distribution during annual campaigns organized with other key agencies	Materials made available to Health Authorities in time for annual events
Identify and promote Best Practices for sun awareness and protection against UV	# of new Best Practice or promising practices identified in the literature, through federal/provincial collaboration, or international conference and adopted for use

Radiation Protection Services

Goal Two:

Detect and Respond to New Disease Threats

Develop institutional mechanisms to rapidly recognizing new hazards, to investigate their occurrence and initiate protective actions

Strategy

- Maintain expertise in the program staff charged with the responsibility to identify occurrences and new threats arising within BC, Canada and around the world
- Maintain an on-going awareness of developments in the scientific and technical disciplines concerning new hazards and changes to existing ones
- Establish reporting mechanisms that provide RPS and other key agencies with early notification of events resulting in or having the potential to cause injury, illness or significant overexposure
- Establish an incident reporting system to identify and track incidents where overexposures and injuries occur
- Issue hazard alerts to key persons and organizations when a potential or actual serious health risk exists

Corporate Level Objectives and Performance Measures Related to Goal 2

2004 – 05 Objectives	Performance Measure
Incident reporting arrangements developed with stakeholders for key program areas by June 2003	# of incident reporting protocols established by June 2003
Emerging issues identified and incorporated into program area surveillance and reporting	# of issues identified and incorporated into surveillance protocols
Hazard alerts issued within 24 hours of the notification of a serious risk and within 72 hours for minor items	Time between hazard recognition and alert communication
Health emergency response arrangements to address CBRN incidents developed in conjunction with HA's, other agencies and Hazmet units	Project plan signed off and implemented to develop public health resource aid for the healthcare industry

Goal Three:

Develop and Apply Advanced Information

Develop and apply advanced surveillance systems for alert and performance monitoring purposes in public health.

Strategy

- Collect medical x-ray partnership program inspection data for review
- Establish on-line linkage to National Dose Registry of Canada
- Maintain a current RPS web site, with program information and links
- Work closely with BCCDC Information Management group to access support resources; work with partners to complete projects currently under development

Corporate Level Objectives and Performance Measures Related to Goal 3

2004 – 05 Objectives	Performance Measure
Completion of the XRW 2002(new version) and XMS(new version) software programs for the x-ray partnership program	Software adopted by x-ray partnership groups
Develop project plan and agreement with Health Canada to establish a fully operational link to the National Dose Registry by 2005	Project plan sign off by Health Canada and BCCDC
Radiation protection component created on BCCDC web site and routinely updated by Radiation Protection Services	# of hits on the RPS sub-component of BCCDC web site. Data to be available in 2005.

Radiation Protection Services

Goal Four:

Create Knowledge Through Applied Research and Innovation

We will work with the Vancouver Coastal Heath Authority imaging specialists, Health Canada and industries to facilitate developments in diagnostic radiography and patient radiation exposure.

Goal Five:

Advance Public Health Excellence

Discover research findings (of international significance) that contribute to evidence-based policy and practice resulting in improved health for British Columbians

Through collaboration in research, establish an environment which fosters innovation and enhances the science for radiation protection

Strategy

- Continuous evaluation of the program methodologies utilized by Radiation Protection
- Develop close partnerships with research organizations and with stakeholders having a shared interest in research outcomes
- Promote investment of material and human resources in British Columbia
- Undertake internal reviews, seek stakeholder input, and compare performance with other jurisdictions

Corporate Level Objectives and Performance Measures Related to Goal 5

2004 – 05 Objectives	Performance Measure
One review completed in each program area per year	# of reviews completed per year
Each program area undertakes at least one research initiative per year	# of research initiatives per year
Establish at least one new link with the local research community	# of links established per year

Goal Six:

Provide Leadership and Create Partnerships

Provide provincial/national leadership and create alliances in order to facilitate the development of an effective integrated public health system for British Columbia and Canada.

Foster the role of Radiation Protection Services as the lead agency for radiation protection in British Columbia and as a key resource for Canada.

Strategy

- Represent BC at the annual meetings of the Federal-Provincial-Territorial Radiation Protection Committee and other federal-provincial meetings concerning radiation protection and nuclear emergency preparedness arrangements affecting BC
- Make contact and consult regularly with key organizations concerning RPS business planning and its operational activities for each of the program areas, to achieve effective outcomes in service delivery
- Host or co-organize national, regional or local conferences and workshops
- Develop and enhance alliances and partnerships with various organizations, including: universities and colleges; regional health authorities; agencies in the Provincial Health Services Authority; WCB; health professions' Colleges/Associations; national organizations such as the Canadian Cancer Society and the Canadian Dermatology Association; Canadian Association of Radiologists and international agencies in the field of radiation protection

Corporate Level Objectives and Performance Measures Related to Goal 6

2004 – 05 Objectives	Performance Measure
Attend the annual Federal Provincial-Territorial meeting; chair and participate in sub-committees; develop business plans and initiatives	# of FPT meetings attended and issues addressed
Organize and host at least one conference or training event	# of events hosted
Consult with Health Authorities, their agencies and other stakeholders on annual business plan and performance objectives	Participation rate re-solicited planning input
Support the establishment of a centre for environmental health within BCCDC, involving RPS as an interlaced program	Functional model for CEH approved; programs and services operationalized. RPS office and laboratory relocated into BCCDC main building

Drug and Poison Information Centre

Derek Daws,
Drug and Poison Information Centre

The Drug and Poison Information Centre (DPIC) serves as the provinces' drug information centre for health care providers and as the poison control centre for both the general public and health professionals. Its primary mandate is to develop and implement centralized services to assist health professionals in providing optimal levels of drug therapy and poison management in the province.

In addition to the core services mentioned above, DPIC is active in promoting prevention programs aimed at reducing unintentional injuries due to poisoning and adverse effects of drug therapy. Programs are aimed at both the public and the providers of health care throughout B.C.

DPIC is a division of the University of British Columbia, Faculty of Pharmaceutical Sciences and as such has a strong role in educating undergraduate and postgraduate pharmacy students, emergency physicians and nursing students. Emphasis is placed on developing skills which promote effective and evidence-based drug therapy and management of the poisoned patient.

Surveillance of patterns and trends in drug usage and exposures to toxic agents is a significant component of DPIC's activities. Trend analysis is used to generate signals which may indicate inappropriate drug therapy or potential outbreaks of product related disease.

Findings are communicated to public health officials, licensing agencies for pharmacists and physicians and the National Adverse Drug Reaction Reporting Centre at Health Canada.

DPIC publishes two textbooks in both hard copy and electronic versions. The Drug Information Reference (DIR) focuses on concise, relevant and evidence-based drug information and is directed towards health care providers. The Poison Management Manual is used extensively within B.C. and Canada as a reference source for managing poisoned patients.

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub-Goal A – Elimination

Through the application of evidence based public health policies, eliminate endemic transmission of communicable diseases, such as – diphtheria, measles, mumps, polio, rubella, Haemophilus influenzae type b (Hib), hepatitis B and syphilis.

Sub-Goal B – Control

Through the application of evidence based public health policies, achieve effective control for diseases such as tuberculosis, HIV, hepatitis A and C, chlamydia, gonorrhea, influenza and pertussis.

Sub-Goal C – Environment

Through the application of evidence based public health policies, reduce the adverse impact of environmental hazards on human health.

Drug and Poison Information Objectives Related to Goals 1 A,B and C

2004 – 05 Objectives	Performance Measure
Develop, in conjunction with Food Protection, Radiation Protection and Environmental Toxicology, the B.C. Centre for Environmental Health for the purpose of monitoring, assessing and preventing environmental hazards to human health	Input into business plan

Drug and Poison Information Centre

Goal Two:

Detect and Respond to New Disease Threats

Strategy

Enhance and apply mechanisms to rapidly recognize and respond to emerging microbial and non-microbial disease threats to human health, including water and food borne disease outbreaks, pandemic influenza, Bioterrorism, SARS, West Nile and Norovirus, and other new emergent infectious disease agents

Drug and Poison Information Objectives Related to Goals 2

2004 – 05 Objectives	Performance Measure
Assess the potential for the ProdTox application as a surveillance method for detecting product related disease and injury	Obtain all documentation and software specifications from Health Canada. Work with Information Management to perform testing and modifications required to reactivate the programs. Develop the business case for roll out if performance assessment is positive

Goal Three:

Develop and Apply Advanced Informatics

Strategy

Develop and apply advanced surveillance systems for alert and performance monitoring purposes in public health

Drug and Poison Information Objectives Related to Goals 3

2004 – 05 Objectives	Performance Measure
Assess the potential for the ProdTox application as a surveillance method for detecting product related disease and injury	Obtain all documentation and software specifications from Health Canada. Work with Information Management to perform testing and modifications required to reactivate the programs. Develop the business case for roll out if performance assessment is positive

Goal Four:

Create Knowledge Through Applied Research and Innovation

Strategy

Discover research findings of international significance that contribute to evidence-based policy and practice that results in improved health for British Columbians.

Attract, develop and retain highly qualified persons to sustain and support state-of-the-art public health services throughout the province.

Drug and Poison Information Objectives Related to Goals 4

2004 – 05 Objectives	Performance Measure
Complete and publish the results of the fomepizole antidote review	Present the results of the review to BCCDC Directors. Publish the results in a peer reviewed journal in the spring of 2004

Drug and Poison Information Centre

Goal Five:

Advance Public Health Excellence

Provide provincial / national leadership and create alliances in order to facilitate the development of an effective integrated public health system for British Columbia and Canada.

Drug and Poison Information Objectives Related to Goals 5

2004 – 05 Objectives	Performance Measure
In partnership with the Government of the Yukon Territory, provide Drug and Poison Information services to the residents and health providers of the Yukon	Develop and activate a Memorandum of Agreement with the Yukon Territory
In partnership with the Interior Health Authority (IHA), provide drug information services and products, to allow the revamping of the pharmacy systems in the IHA	Develop and activate a Memorandum of Agreement with the IHA
In partnership with the BC Injury Prevention Research Unit and the B.C. Pharmacy Association, develop and implement a prevention program aimed at reducing the incidence of medication induced falls	Program developed and implemented in the autumn of 2003.

2003/2004

A Year in Review

2003/2004
A Year in Review

In 2003-2004 fiscal year BCCDC initiated an annual Performance Planning Process with quarterly divisional progress reports. The following summarizes the results of Year 2003-2004

Goal One:

Prevent, Control and Eliminate Communicable Disease and Environmental Hazards

Sub Goal

Eliminate Communicable Diseases

Specific disease and detection targets and laboratory targets were met, and progress was made, in achieving the long term goal of disease elimination for a number of communicable diseases. The new acellular pertussis vaccine appears to be improving control of the whooping cough. Social Network case finding methodology continues to be successful in finding new cases of syphilis and in linking cases and contacts. The syphilis outbreak in the downtown eastside among sex trade workers and their customers appears to be leveling off but the outbreak in gay men continues to grow.

A public media campaign to address the gay community syphilis outbreak will be launched in the Fall of 2004.

Sub Goal

Control of Communicable Diseases

Specific disease and detection targets were met, hard to reach high risk groups continue to present a challenge, for immunization case finding and treatment. Significant progress was made in developing hepatitis pilot projects in conjunction with regional health authorities to integrate prevention and care management practices. As well, negotiations with the federal government have resulted in a transfer of tuberculosis screening for immigrants and refugees to BCCDC which should improve case finding, prevention, and treatment. New treatment improvements for hepatitis C have resulted in increased pressure for sophisticated laboratory testing. More effective tests were developed including a HSP molecular test for tuberculosis that is less expensive and faster. Laboratory Services also lead Canada in other developments including new molecular (DNA) tests for SARS and Corona viruses. The Chlamydia province-wide population based survey was completed and the data is being analyzed. Early analysis suggests that the population rate of Chlamydia infection may be comparable to the rate of new case reporting. This would mean that the current system of Chlamydia reporting by labs and physicians is actually a good reflection of the real prevalence and incidence. This finding is counter to the accepted wisdom that Chlamydia infection rates are vastly under-estimated by Chlamydia reporting statistics.

Goal Two:

Detect and Respond to New Disease Threats

The new viral disease of SARS dominated Canada and the world over the past year. BCCDC's preparation for bioterrorism and pandemic influenza provided a solid foundation for early detection and response to SARS. Other challenges met included; preparation for West Nile Virus, bioterrorism threats associated with anthrax, and food borne disease outbreaks related to cheese processing and food handling. Challenges remain in the area of re-emergence of SARS and other respiratory viruses, the need for vaccine and advanced informatics for early outbreak detection. STD/AIDS Control is involved in several important studies of HPV prevalence and the division is part of a PHSA committee that is responsible for the integration of HPV type-specific testing with Pap smears done at BCCA laboratory.

Goal Three:

Advanced Informatics

The provincial Public Health Information System (PHIS) was successfully converted to a web based system more easily utilized by Health Authorities. Futher upgrades are being instituted which will allow individualized reminders to be sent to parents whose children have missed out on immunization. An outbreak reporting module was deployed. A protocol has been developed to apply alerts to the CD data base. The TB Module has experienced data conversion challenges and did not meet current fiscal year start date target. Collaborative efforts with the Health Authorities were strengthened to facilitate joint management and ongoing development of PHIS. Information capacity, in support of the public health function, remains a critical challenge and brought to priority attention in Canada because of SARS. The STD/HIV/AIDS cubes are in the final stages of completion and the Soul Access project will be piloted in November 2004. If successful this important new initiative will be online early in 2005. Using this system, the Health Authorities will be able to independently analyze real-time data at the HA level without necessarily involving STD Control. The Environmental Health Laboratory is working closely with the Ministry of Health's Drinking Water Information Management Program.

Goal Four:

Foster Applied Research and Innovation

BCCDC, through its research affiliate UBC-CDC experienced continued recognition and financial support for research. $580,000 were received in new CIHR funding, including studies on environmental health issues (enhanced drinking water surveillance) and emerging pathogens (Cyclospora parasitic infections) totaling over $5,000,000 for research currently underway at BCCDC. As well, medical staff have maintained teaching responsibilities and a number of graduate and post-graduate students are engaged.

2003/2004 A Year in Review

Goal Five:

Maintain Public Health Excellence

Radiation Protection Services, Food Protection Services, and Drug and Poison Information Centre were successfully transferred to BCCDC. Provincial compensation plan adopted for physicians significantly strengthened recruitment and retention for medical staff. There continues to be a problem with recruitment and retention of research support, scientific and administrative support staff at BCCDC. Staff survey completed demonstrated a high degree of job satisfaction and team performance but reinforced the need for a continuing priority for staff development and training. A variety of successful outreach training initiatives were carried out by BCCDC staff in support of the Health Authorities and patients, families and communities concerned with public health issues. Teaching and graduate student training continued as a successful and mutually rewarding experience for BCCDC. The STD Management Nursing Certification initiative responding to new Scope of Practice legislation is making good progress. STD Control expects to be designated as the official certifying agency by RNABC and PHSA in early 2005. Laboratory Services hosted several highly successful training, team-building and planning sessions with provincial Environmental Health Officers, technologists and other health care workers.

Goal Six :

Provide Leadership and Support Partnerships

BCCDC's leadership in public health, especially in relation to the SARS and Bioterrorism crisis, has resulted in numerous opportunities for national leadership. BCCDC is emerging as a model public health resource which is likely to form the basis of national and provincial developments over the years ahead. BCCDC continues to make a strong contribution to the Ministry of Health Planning and Provincial Health Officer's process to define public health core functions and develop a new Health Act. Chee Mamuk will be hiring a program evaluator with new funding from First Nations and Inuit Health Branch, Health Canada. A five year CIDA Agreement has been finalized which will support BCCDC's ongoing work in Vietnam, providing STD/HIV expertise, consistent with the International Health interests of PHSA. Under this program, 3 new STD clinics will open in 3 southern Vietnam provinces in 2004. Laboratory Services is a recognized leader in the new and growing Canadian Public Health Laboratory Network (CPHLN). This leadership also includes the charge of the National Water and Food Safety Subcommittee.

(2003/2004) Fiscal Management

Despite service pressures in Laboratory and inflationary costs in biologicals BCCDC managed expenditures to meet 2003/2004 budget requirements.

UBC CDC Research Report

BCCDC is committed to working with the Health Authorities, research institutions, and public and private sector partners to strengthen British Columbia's ability to confront new disease challenges.

UBC CDC 2004 Research Report

Research supports programs and integrates activities at the BCCDC. Research impacts public health through discovery, knowledge translation, innovative techniques, policy development, and practice.

Established in 1999, UBC CDC provides a coordinated approach to public health that includes service, research and education. Since the UBC CDC's inception, BCCDC researchers have received $15 million dollars in funding to support over 50 research projects. This success confirms the linkage of academics with service professionals enhances evidence-based practice and ensures we can protect the health of British Columbians. Some 2004 successes include:

- The SARS Accelerated Vaccine Initiative (SAVI) Project
- Avian Influenza H7N3 Sequencing and Sero Epidemiology Study
- STD Social Network Studies
- TB Treatment Trials

While most projects are primarily based within one of BCCDC's 8 divisions, all of the divisions work interactively to create unique synergy, an increasingly important strength of the BCCDC. Weekly Grand Rounds (presentations on key public health topics of interest) facilitate information sharing and collaboration among all divisions and with external partners.

In October 2003, UBC CDC underwent a successful and informative external review of its achievements and progress to date. Key findings reflected in the review have led to new research directions in genomics, vaccine discovery, global health and administrative mechanisms to support research, namely the establishment of a research development unit and the proposal to establish a foundation.

Genomics – With the sequencing of the SARS and avian influenza genomes, genomics research of emerging infectious diseases is now recognized as a critical element in public health and the information generated by genomics will, in the long-term, have major benefits for the prevention, diagnosis and management of emerging diseases. UBC CDC researchers have the necessary expertise in genotyping pathogens, nucleic acid tests such as RT-PCR and immunodiagnostic testing. The UBC CDC has recently submitted a proposal to Genome Canada for funding to create an integrated research program that applies genomics and proteomics technologies to rapidly identify targets and develop diagnostics, therapeutics and vaccines for emerging and re-emerging infectious diseases.

Accelerated Vaccine Discovery – The SARS Accelerated Vaccine Initiative (SAVI) has successfully constructed a rapid and parallel science response approach to vaccine development that can readily be used in times of public health crisis. The SAVI team was able to initiate several simultaneous vaccine discovery projects and has developed three prototype vaccine candidates. Two of these candidates have been tested in animal models in head-to-head challenges. Utilizing this novel accelerated approach to vaccine development, the UBC CDC spearheaded a proposal for a Canadian Vaccine Agency (CAVA) that would link expertise in vaccine development, clinical evaluation and immunization programs across the country. This idea has now been picked up by CIHR who are carrying the concept forward in conjunction with the Public Health Agency of Canada and the National Immunization Strategy.

Global Health – Emerging and re-emerging infectious diseases present one of the most significant health challenges facing the global public health community today; the UBC CDC is committed to global health research. The BCCDC is already involved in this area of research with our involvement in the Vietnam HIV/AIDS Community Clinics Network Project. The UBC CDC would like to further BCCDC's involvement in global health initiatives and so has written a business plan called Global REACH that outlines a comprehensive approach to our involvement in global health work.

CDC Foundation for Public Health – Many health agencies in British Columbia have foundations to accept donations and provide financial management and support for research. A proposal to create the CDC Foundation for Public Health has been developed. The Foundation would facilitate quick and effective responses when required and tap into new funding resources such as the public and corporate donor communities.

UBC CDC 2004 Research Report

Among the several new research projects generously funded through grants and industry contracts, the following provides a snapshot of some of the research currently funded at BCCDC:

Funding Agency	Principle Investigator	Total Funding Amount In Canadian Dollars
BC Lung Association		
Genetic variation in isoniazid metabolism genes: effect on and use for prediction of hepatotoxicity	Fawziah Marra	90,000
Centre for Disease Control, Atlanta		
Use of network analysis methods to characterize M. tuberculosis transmission patterns among women and other high risk populations	Victoria Cook	134,000
CIHR		
Impact of water quality risk factors on gastro-intestinal illness in a rural-urban community	Judith Isaac-Renton	71,546
Globally emerging food and waterborne parasitic diseases	Corrine Ong	97,000
Impact of self-sampling for human papillomavirus and targeted recruitment on uptake of cervical cancer screening in marginalized urban women	Gina Ogilvie	92,000
The spread and evolution of SARS coronaviruses through contact networks: Prediction, recognition, and control.	Babak Pourbohloul	216,000
Health Canada		
Impacts of climate change on spread of lyme disease in Canada	Morshed Muhammed	224,000
Industry		
Aventis Pasteur – Chlamydia research program	Robert Brunham	1 million
Aventis Pasteur – Pertussis outbreaks in BC schools	Danuta Skowronski & Aleina Tweed	18,250
NIH		
Using contact networks to control and predict outbreaks	Babak Pourbohloul	110,000
Comparative genomics of chlamydia	Robert Brunham	540,000
Ovarian cancer	Robert Brunham	310,000

Recently, Health Canada has announced the creation of five national centres of excellence as part of the network of the Public Health Agency of Canada. The National Collaborating Centre for Environmental Health will be located at the BCCDC. Part of the mandate of this new national centre includes conducting research and helping individuals and communities respond to environmental hazards across Canada.

Contributing to the greater good through public health research pays off in many ways; among them is recognition by our peers. Dr. Robert Brunham was recently awarded the Thomas Parran award for 2004 from the American Sexually Transmitted Disease Association for an exemplary career in research and control of sexually transmitted infections. Valencia Remple, Research Coordinator for Epidemiology and Ph.D. candidate, was awarded the Michael Smith Senior Graduate Studentship award (2004-2006).

We would like to take this opportunity to recognize the research contributions of Dr. Murray Fyfe who recently left the Division of Epidemiology. Dr. Fyfe was involved in research on Cryptococcus outbreaks on Vancouver Island, Yersinia enterocolitica and Salmonella Typhimurium case control studies, a Hepatitis A seroprevalence study and West Nile Virus. We are currently involved in recruiting a new physician epidemiologist and look forward to having a new member on our epidemiology team.

Research has an important and integrative role at the BCCDC. With substantial research funding comes the need to support this research. The UBC CDC is currently undergoing significant changes to accommodate and support research at BCCDC. In 2004, we began to form a UBC CDC Research Development Unit (RDU). RDU will provide support to researchers at BCCDC through two new staff members who will be responsible for the overall coordination and management of research at BCCDC and will assist with individual research projects. Immediate new initiatives for the RDU will be a revised UBC CDC website and a newsletter that showcases BCCDC members' contributions to public health research. 2005 should see an enhancement of research capacity throughout the BCCDC.

Our applied research makes a real difference to public health. We look forward to continuing to be leaders in infectious disease research and using this knowledge to contribute to the improved health of people in British Columbia and elsewhere.

Corporate Information

Corporate Information

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Mary Jordan, , Provincial Executive Director

Dr. Robert Brunham, Director, Medical & Academic Affairs UBC/CDC

Larry Copeland, Director, Food Protection Services

Dr. Ray Copes, Director, Environmental Health – Toxicology

Derek Daws, Drug & Poison Information Centre

Dr. Kevin Elwood, Director, TB Control

Sharon deLisser, Manager, Administration

Dr. Judy Isaac-Renton, Director, Laboratory Services

Dr. Mel Krajden, Director, Hepatitis Services

Dr. Fawziah Marra, Director, Vaccine and Pharmacy Services

Dr. David Patrick, Director, Epidemiology Services

Brian Phillips, Director, Radiation Protection Services

Dr. Michael Rekart, Director, STD/AIDS Control

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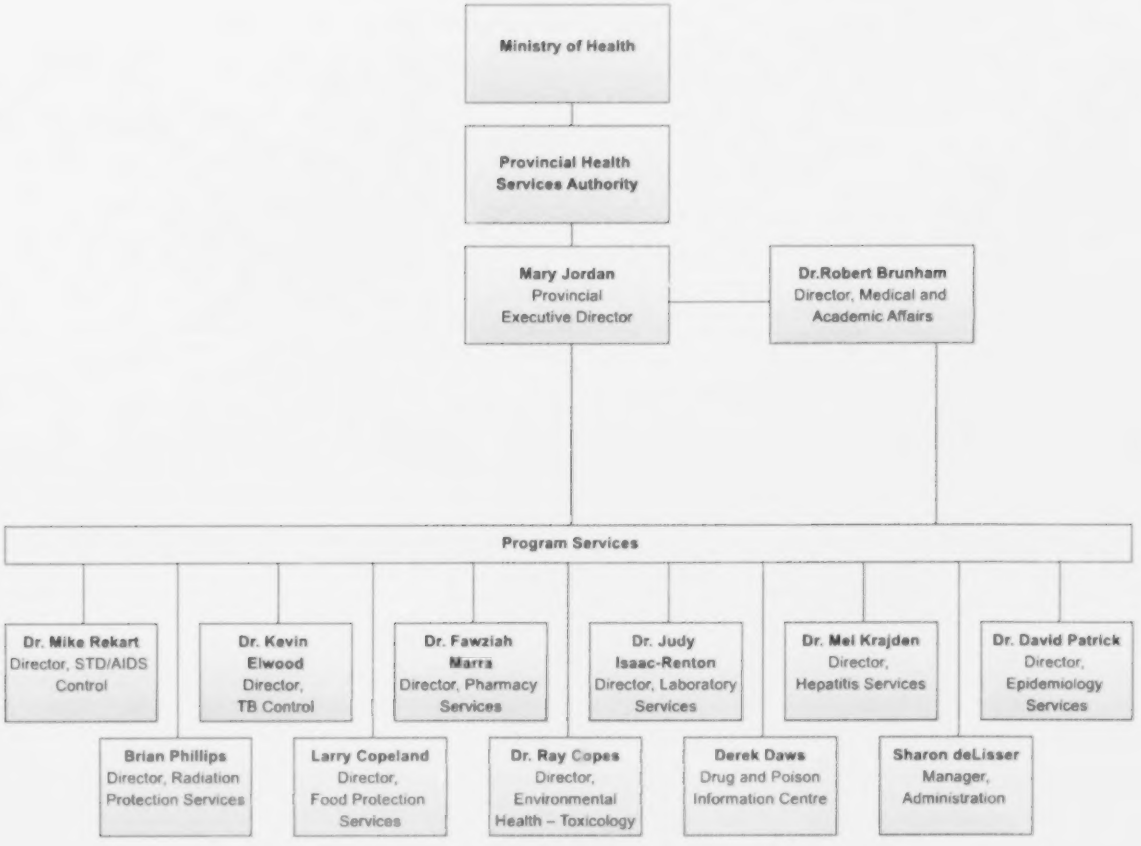
Organization

We respect and support each other. The rights and needs of each one of us are important to all of us. We all have the right to be heard in the decisions that affect us.

BCCDC Management Team

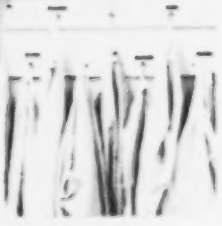


BC Centre for Disease Control

AN AGENCY OF THE PROVINCIAL HEALTH SERVICES AUTHORITY

PERFORMANCE PLAN

04/05



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